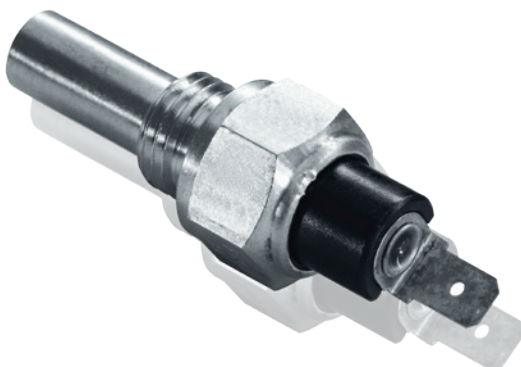




www.vdo.com

Sensors for Instrumentation v 4.0



VDO



The Company

Alongside our many specialised solutions for automotive manufacturers, we also offer comprehensive solutions and services for the aftermarket. Spare parts of matching quality, supplied with the experience and proven expertise of an OEM supplier are a particular strength. Our comprehensive range of spare parts of matching quality is readily available and is synonymous with a perfect fit, simple installation and consistently reliable quality, offering significant advantages for distributors, workshops and consumers alike.





Sensors from VDO

For reliable measurement

Monitoring a variety of data is an important factor for reliable vehicle operation and long service life. Crucial readings include information on pressure, temperature and rpm, as well as speed and fuel level. Thresholds are defined for many data items and if these are not met – or are exceeded – vehicle safety may be impacted, or serious engine damage can occur.

Sensors measure data in various parts of the vehicle and VDO therefore offers a wide range of reliable, high-performance sensors.












The product range sensors for instrumentation includes:

- Pressure Senders
- Pressure Switches
- Temperature Senders
- Temperature Switches
- RPM and Speed Senders
- Lever-Type Senders
- Tubular-Type Senders





Contents

	The Company	2
	Introduction Sensors for Instrumentation	6
	Pressure Senders	11
	Pressure Switches	25
	Temperature Senders	29
	Temperature Switches	47
	RPM and Speed Senders	55
	Lever-Type Senders	67
	Tubular-Type Senders	79
	Cross-Reference List	95
	Legend	149

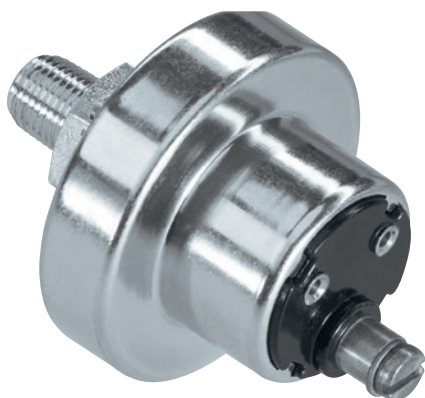


Pressure Senders

For measuring gas or fluid pressure in connection with an electrical display unit. Some senders are earthed. Other senders are not earthed, i.e. earth is supplied by a separate connection. Pressure senders can be fitted with an additional warning contact in order to indicate when the pressure limit has been reached, as well as carrying out continuous measurement.

The pressure sender types in the product range include:

- Without Warning Contact, Common Ground
- With Warning Contact, Common Ground
- Without Warning Contact, Insulated Return
- With Warning Contact, Insulated Return



Pressure Switches

For monitoring the pressure of gases and fluids by making contact when a pre-defined limiting value is exceeded or not reached. Some switches are earthed. Other switches are not earthed, i.e. earth is supplied by a separate connection.

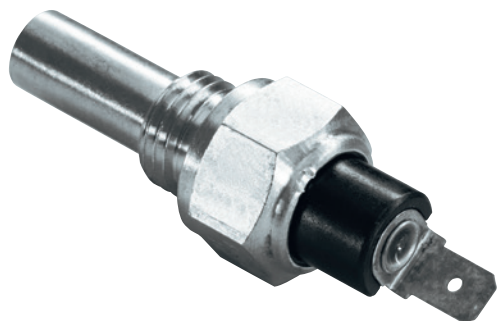


Temperature Senders

For measuring different media in connection with an electrical display unit. Some senders are earthed. Other senders are not earthed, i.e. earth is supplied by a separate connection. Temperature senders can be fitted with an additional warning contact in order to indicate when the temperature limit has been reached, as well as carrying out continuous measurement.

The temperature sender types in the product range include:

- Without Warning Contact, Common Ground or Insulated Return
- With Warning Contact, Common Ground
- With 2 Measuring Points
- For Bimetal Indicating Instruments
- Air (VDO cockpit vision/VDO cockpit international)
- Air (VDO LCD cockpit)



Temperature Switches

For monitoring the temperature of different media by making contact when a pre-defined limiting value is exceeded or not reached. Some switches are earthed. Other switches are not earthed, i.e. earth is supplied by a separate connection.

The temperature switch types in the product range include:

- Type A: 1.2–3 W, Common Ground
- Type B: 100/120 W, Insulated Return



RPM and Speed Senders

For the measurement and display of RPM and speed of engines and gears in connection with an electrical display unit. Some senders are earthed. Other senders are not earthed, i.e. earth is supplied by a separate connection.

The RPM and speed sender types in the product range include:

- Blocking-Oscillator Senders
- Frequency-Generator Senders
- Generator-Type Senders
- Hall-Effect Senders
- Inductive Senders



Lever-Type Senders

For the measurement of the fuel level in connection with an electrical display unit. Some senders are earthed. Other senders are not earthed, i.e. earth is supplied by a separate connection.

The lever-type sender types in the product range include:

- Without Warning Contact, Insulated Return
- Without Warning Contact, Insulated Return (adjustable)
- Without Warning Contact, Insulated Return (special)



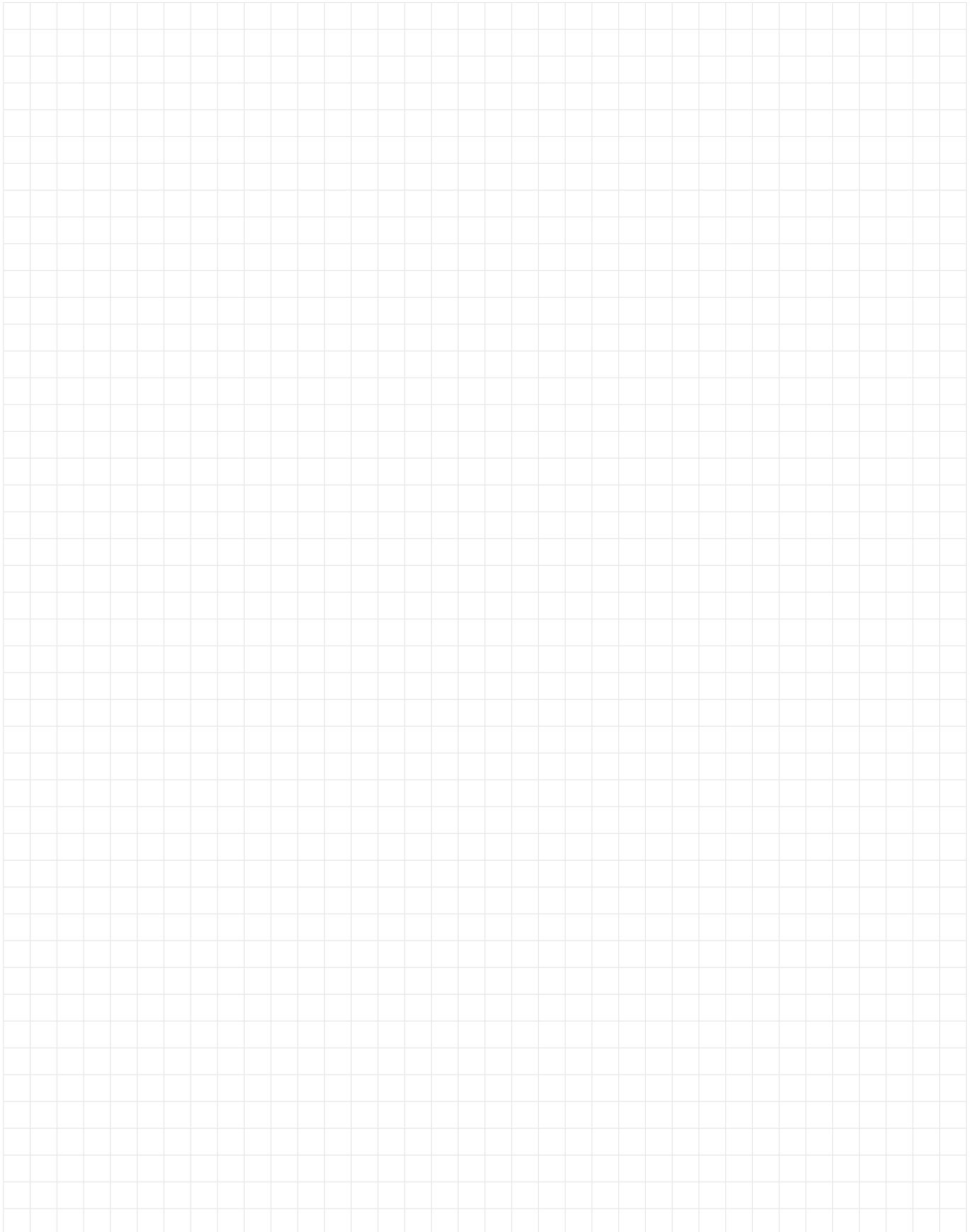
Tubular-Type Senders

For the measurement of the fuel level in connection with an electrical display unit. Some senders are earthed. Other senders are not earthed, i.e. earth is supplied by a separate connection. Tubular-type senders can be fitted with an additional warning contact in order to indicate when a certain fuel level limit has been reached, as well as carrying out continuous measurement.

The tubular-type sender types in the product range include:

- Without Warning Contact, Common Ground or Insulated Return (ø 54 mm)
- Without Warning Contact, Common Ground or Insulated Return (ø 80 mm)
- With Warning Contact, Common Ground or Insulated Return (ø 54 mm)
- Without Warning Contact, Common Ground or Insulated Return (special)







Pressure Senders

Without Warning Contact, Common Ground	12
With Warning Contact, Common Ground	14
Without Warning Contact, Insulated Return	18
With Warning Contact, Insulated Return	20
Tightening Torques for Pressure Senders	22



Without Warning Contact, Common Ground

Technical Data

Rated voltage:

6 V to 24 V

Overpressure safety:

30 bar, 40 bar or 50 bar max.
(short periods only for 2 sec)

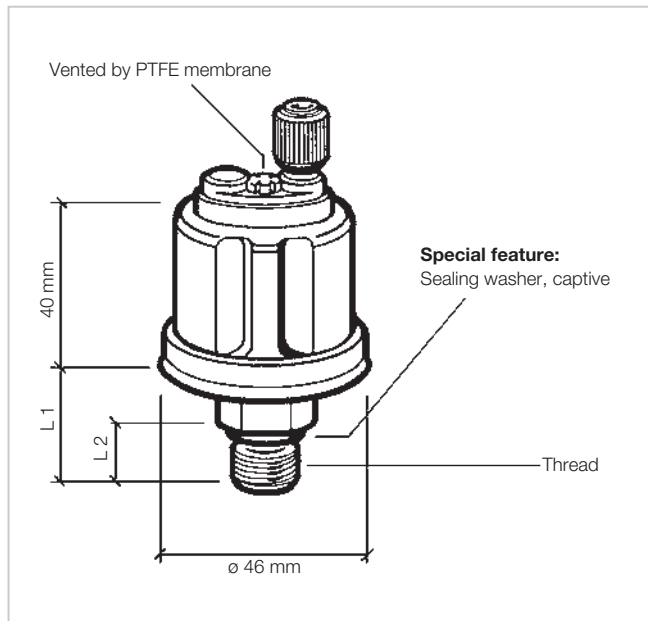
Operating temperature:

-25° C to +100° C
(up to +120° C for 1 hour max.
at threaded connector)

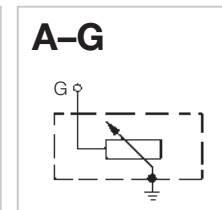
Resistance range:

10 Ω to 184 Ω






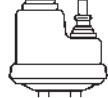
Dimensions



Circuit Diagram



Type of Connection

<p>A Knurled nut M4</p> 	<p>B Hex nut M4</p> 	<p>D 6.3 x 0.8 mm 50° M4</p> 
<p>E 6.3 x 0.8 mm 90° M4</p> 	<p>F Connector pin ø 4 mm M4</p> 	<p>G Connector pin ø 4 mm 35.5 mm</p> 



Article No.						
360-081-029-001C	5	-	M10 x 1 con. short	19.5	11	A
360-081-029-001K	5	-	M10 x 1 con. short	19.5	11	A
360-081-029-004C	5	-	1/8 – 27 NPTF	19.5	11	A
360-081-029-008C	5	-	1/4 – 18 NPTF	23.8	15.3	A
360-081-029-010C	10	-	M10 x 1 con. short	19.5	11	A
360-081-029-010K	10	-	M10 x 1 con. short	19.5	11	A
360-081-029-012C	10	-	1/8 – 27 NPTF	19.5	11	A
360-081-029-012K	10	-	1/8 – 27 NPTF	19.5	11	A
360-081-029-013C	10	-	M12 x 1.5	20.5	12	A
360-081-029-013K	10	-	M12 x 1.5	20.5	12	A
360-081-029-020C	10	-	1/4 – 18 NPTF	23.8	15.3	A
360-081-029-025C	5	-	M18 x 1.5	20.5	12	A
360-081-029-025K	5	-	M18 x 1.5	20.5	12	A
360-081-029-026C	5	-	M14 x 1.5	20.5	12	A
360-081-029-026K	5	-	M14 x 1.5	20.5	12	A
360-081-029-033C	10	-	M14 x 1.5	20.5	12	A
360-081-029-038C	10	-	M14 x 1.5	20.5	12	D
360-081-029-041C	5	-	1/8 – 27 NPTF	19.5	11	E
360-081-029-042C	10	-	1/8 – 27 NPTF	19.5	11	D
360-081-029-059C	5	-	M18 x 1.5	20.5	12	B
360-081-029-062C	10	-	R 1/8 DIN 2999	19.5	11	D
360-081-029-065C	5	-	M14 x 1.5	25.5	12	B
360-081-029-085C	5	-	M12 x 1.5	20.5	12	A
360-081-029-087C	3	-	M12 x 1.5	20.5	12	F
360-081-032-004C	10	-	M12 x 1.5	20.5	12	A
360-081-037-003C	25	-	M18 x 1.5	20.8	12	E
360-081-037-006C	16	-	M14 x 1.5	20.5	12	B
360-081-037-007C	16	-	1/8 – 27 NPTF	20.5	12	E
360-081-037-008C	25	-	M10 x 1 con. short	19.5	11	D
360-081-037-010C	25	-	1/8 – 27 NPTF	20.5	11	E
360-081-037-011C	25	-	M10 x 1 con. short	19.5	11	D
360-081-037-013C	25	-	M14 x 1.5	20.5	12	E
360-081-037-017C	25	-	M14 x 1.5	20.5	12	E
360-081-037-018C	25	-	M18 x 1.5	20.5	12	E
360-081-037-019C	16	-	M12 x 1.5	20.5	12	B
360-081-038-008C	400 PSI	-	1/8 – 27 NPTF	n/a	11	A
360-081-052-003C	3	-	M12 x 1.5	20.5	12	G
362-081-002-003C	400 PSI	-	1/8 – 27 NPTF	n/a	10	A



With Warning Contact, Common Ground

Technical Data

Rated voltage:

6 V to 24 V

Overpressure safety:

30 bar or 50 bar max.
(short periods only for 2 sec)

Warning contact:

Closes as pressure falls

Switching capacity of warning contact:

5 W max. non-inductive

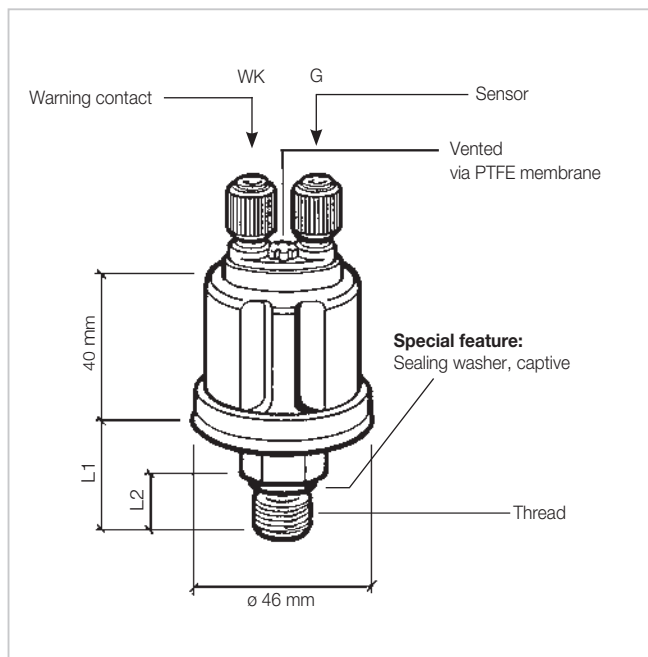
Operating temperature:

-25° C to +100° C (up to +120° C for 1 hour max. at threaded connector)

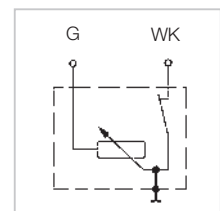
Resistance range:

10 Ω to 184 Ω

Dimensions



Circuit Diagram



Type of Connection

<p>A Knurled nut (2x)</p>	<p>B 6.3 x 0.8 mm (2x)</p>	<p>C WK: 6.3 x 0.8 mm G: 4.8 x 0.8 mm</p>	<p>D WK: 4.8 x 0.8 mm G: 6.3 x 0.8 mm</p>	<p>E Hex nut (2x)</p>	<p>F WK: 6.3 x 0.8 mm</p>
<p>H G: 6.3 x 0.8 mm</p>	<p>J 6.3 x 0.8 mm (2x)</p>	<p>L WK: 6.3 x 0.8 mm G: 4.8 x 0.8 mm</p>	<p>N Hex nut (2x)</p>	<p>O Special push-on connector</p>	
<p>P Special push-on connector</p>					



Article No.



360-081-030-001C	5	0.25 + 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-001K	5	0.25 + 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-002C	5	0.5 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-002K	5	0.5 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-004C	5	0.7 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-006C	5	0.6 ± 0.15	M12 x 1.5	20.5	12	A
360-081-030-008C	5	0.5 ± 0.15	M12 x 1.5	20.5	12	A
360-081-030-009C	10	0.5 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-009K	10	0.5 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-010C	5	1.4 ± 0.3	1/8 – 27 NPTF	19.5	11	A
360-081-030-014C	5	0.6 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-015C	10	0.8 ± 0.3	1/8 – 27 NPTF	19.5	12	A
360-081-030-017C	10	0.9 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-018C	5	1.2 ± 0.15	M10 x 1 con. short	19.5	11	A
360-081-030-019C	10	1.5 ± 0.15	M12 x 1.5	20.5	12	A
360-081-030-020C	80 PSI	8 ± 2.0 PSI	1/4 – 18 NPTF	23.8	15.3	A
360-081-030-022C	10	0.5 ± 0.15	M12 x 1.5	20.5	12	A
360-081-030-023C	80 PSI	6 ± 2.0 PSI	1/8 – 27 NPTF	19.5	11	A
360-081-030-025C	5	0.4 ± 0.2	M18 x 1.5	20.5	12	B
360-081-030-028C	5	0.5 ± 0.15	M14 x 1.5	20.5	12	A
360-081-030-028K	5	0.5 ± 0.15	M14 x 1.5	20.5	12	A
360-081-030-030C	10	0.7 ± 0.15	M14 x 1.5	20.5	12	A
360-081-030-031C	10	0.5 ± 0.15	M10 x 1 con. short	19.5	11	B
360-081-030-032K	10	0.5 ± 0.15	M14 x 1.5	20.5	12	A
360-081-030-032C	10	0.5 ± 0.15	M14 x 1.5	20.5	12	A
360-081-030-033C	5	0.4 ± 0.1	M14 x 1.5	20.5	12	F
360-081-030-036C	5	0.5 ± 0.15	M18 x 1.5	20.5	12	A
360-081-030-036K	5	0.5 ± 0.15	M18 x 1.5	20.5	12	A
360-081-030-037C	10	0.75 ± 0.2	M18 x 1.5	20.5	12	A
360-081-030-039C	10	0.75 ± 0.15	M10 x 1 con. short	19.5	11	B
360-081-030-041C	10	2 ± 0.3	M10 x 1 con. short	19.5	11	A
360-081-030-049C	5	0.4 ± 0.1	1/8 – 27 NPTF	19.5	11	A
360-081-030-049K	5	0.4 ± 0.1	1/8 – 27 NPTF	19.5	11	A
360-081-030-052C	10	0.5 + 0.2 -0.1	1/8 – 27 NPTF	19.5	11	A
360-081-030-053C	5	0.25 ± 0.15	M18 x 1.5	20.5	12	B
360-081-030-063C	10	1 ± 0.15	M14 x 1.5	20.5	12	B
360-081-030-065K	5	0.4 ± 0.15	R 1/8 DIN 2999	19.5	11	B
360-081-030-070C	10	0.5 ± 0.2	M18 x 1.5	20.5	12	B
360-081-030-071C	5	0.4 ± 0.15	M14 x 1.5	20.5	12	F
360-081-030-074C	10	0.5 ± 0.2	M18 x 1.5	20.5	12	A
360-081-030-075C	10	5 ± 0,3	M14 x 1.5	20.5	12	H
360-081-030-078C	10	1 ± 0,15	M14 x 1.5	20.5	12	E



Article No.						
360-081-030-086C	5	0.5 +0.2 -0.1	1/8 – 27 NPTF	19.5	11	C
360-081-030-097C	5	0.5 ±0.15	M14 x 1.5	20.5	12	B
360-081-030-100C	10	4 +0.5	1/8 – 27 NPTF	19.5	11	B
360-081-030-107C	10	5.5 ±0.3	M16 x 1.5	20.5	12	D
360-081-030-112C	10	1.35 ±0.15	M10 x 1,0	18.5	10	L
360-081-030-119C	5	1.4 ±0.3	1/8 – 27 NPTF	19.5	11	J
360-081-030-122C	10	0.75 ±0.2	M18 x 1.5	20.5	12	D
360-081-030-138C	10	1.25 ±0.3	1/8 – 27 NPTF	19.5	10	L
360-081-030-152C	10	5.2 ±0.5	M10 x 1 con. short	19.5	11	J
360-081-030-157C	5	0.5 ±0.15	M18 x 1.5	20.5 ±0.5	12 ±0.5	L
360-081-034-002C	5	0.25 ±0.15	M14 x 1.5	20.5	12	N
360-081-034-004C	5	0.25 ±0.15	M18 x 1.5	20.5	12	N
360-081-053-001C	25	15.5 +1.5 -0.5	1/8 – 27 NPTF	19.5	11	J
360-081-053-003C	25	5.5 +1,0 -0.5	M18 x 1.5	20.5	12	L
360-081-053-004C	25	14.5 +1.5 -0.5	1/8 – 27 NPTF	19.5	11	B
360-081-061-002C	10	0.7 ±0.15	M14 x 1.5	20.5	12	O
360-081-061-003C	10	1 ±0.15	M14 x 1.5	20.5	12	O
360-081-061-006C	10	5 ±0.3	M12 x 1.5 con. short	21.5	13	O
360-081-062-002A	5	0.4 ±0.2	M14 x 1.5	20.5	12	P
360-081-062-003C	10	5.5 ±0.3	M14 x 1.5	20.5	12	P
360-081-062-004A	5	1 ±0.2	M14 x 1.5	20.5	12	P
360-081-062-005A	10	3 ±0.3	M14 x 1.5	20.5	12	P
360-081-064-003C	5	0.25 ±0.15	M18 x 1.6	20.5	12	D





Without Warning Contact, Insulated Return

Technical Data

Rated voltage:

6 V to 24 V

Overpressure safety:

30 bar or 50 bar max.
(short periods only for 2 sec)

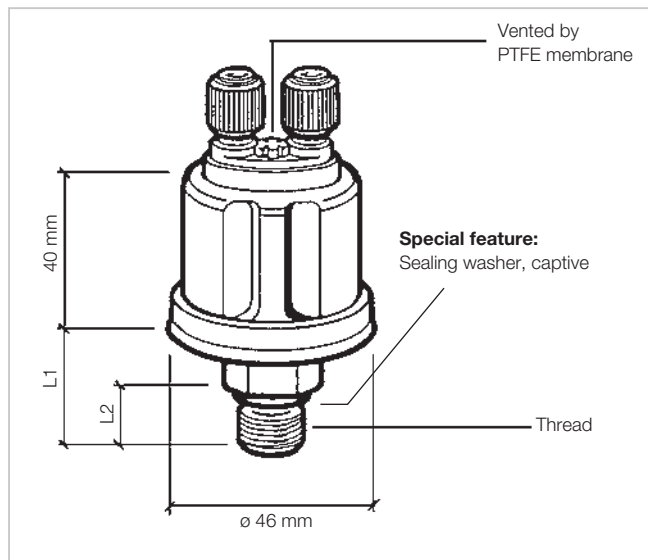
Operating temperature:

-25° C to +100° C
(up to +120° C for 1 hour max.
at threaded connector)

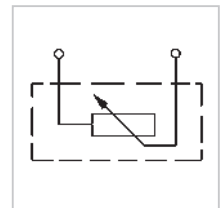
Resistance range:

10 Ω to 184 Ω

Dimensions



Circuit Diagram



Type of Connection

<p>A Knurled nut (2x)</p> <p>M4 M4</p>	<p>B 6.3 x 0.8 mm (2x)</p> <p>M4 M4</p>	<p>C 6.3 x 0.8 mm (2x)</p> <p>50° M4 50° M4</p>	<p>D 6.3 x 0.8 mm (2x)</p> <p>90° M4 90° M4</p>
<p>E Hex nut (2x)</p> <p>M4 M4</p>	<p>F 6.3 x 0.8 mm (1x) 4.8 x 0.8 mm (1x)</p> <p>90° M4 90° M4</p>	<p>H Special push-on connector M = Ground G = Sensor</p>	



Article No.						
360-081-032-001C	5	-	1/8 – 27 NPTF	19.5	11	A
360-081-032-002C	5	-	M10 x 1 con. short	19.5	11	A
360-081-032-003C	10	-	M10 x 1 con. short	19.5	11	A
360-081-032-006C	10	-	M14 x 1.5	20.5	12	A
360-081-032-007C	5	-	1/8 – 27 NPTF	19.5	11	B
360-081-032-008C	10	-	M18 x 1.5	20.5	12	A
360-081-032-011C	2	-	M12 x 1.5	20.5	12	C
360-081-032-013C	5	-	M18 x 1.5	20.8	12	A
360-081-032-014C	10	-	1/8 – 27 NPTF	19.5	11	A
360-081-032-016C	5	-	1/4 -18 NPTF	23.8	15.3	A
360-081-032-025C	2	-	1/8 – 27 NPTF	19.5	11	C
360-081-032-052C	5	-	1/8 – 27 NPTF	19.5	11	C
360-081-032-053C	10	-	M12 x 1.5	20.5	12	A
360-081-032-059C	5	-	M18 x 1.5	20.5	12	E
360-081-032-060C	5	-	M14 x 1.5	20.5	12	E
360-081-038-001C	25	-	M14 x 1.5	20.5	12	E
360-081-038-002C	25	-	3/8 -18 Dryseal NPTF	23.8	15.3	B
360-081-038-003C	25	-	1/8 – 27 NPTF	19.5	11	E
360-081-038-005C	25	-	M18 x 1.5	20.5	12	A
360-081-038-014C	16	-	M14 x 1.5	20.5	12	E
360-081-051-012C	10	-	M16 x 1.5	20.5	12	H
360-081-051-013C	7	-	1/8 – 27 Dryseal NPTF	19.5	10	H
360-081-054-002Z	30	-	M18 x 1.5	20.5	12	H
362-081-001-001K	5	-	1/8 – 27 Dryseal NPTF	19.5	10	D
362-081-002-004C	400 PSI	-	1/8 – 27 Dryseal NPTF	19.5	10.5	A
362-081-003-001C	5	-	1/8 – 27 NPTF	n/a	n/a	A



With Warning Contact, Insulated Return

Technical Data

Rated voltage:

6 V to 24 V

Overpressure safety:

30 bar or 50 bar max.
(short periods only for 2 sec)

Warning contact:

Closes as pressure falls

Switching capacity of warning contact:

5 W max. non-inductive

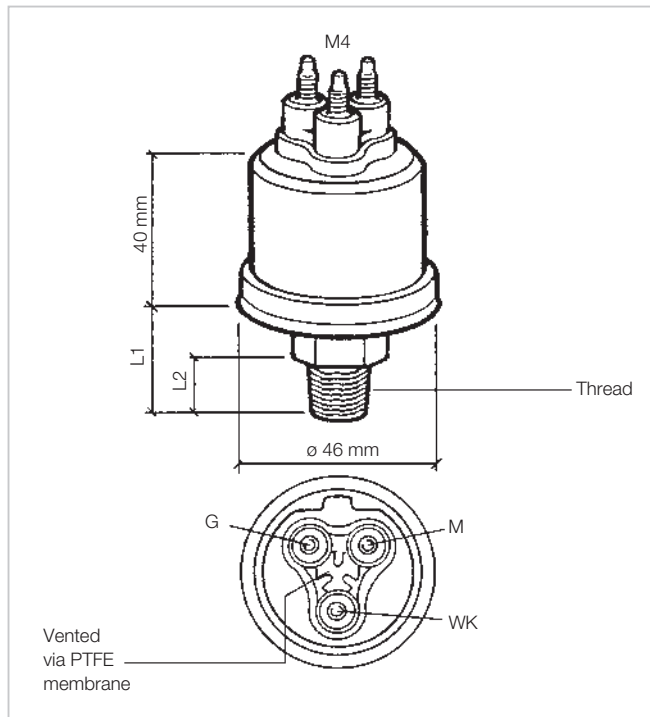
Operating temperature:

-25° C to +100° C
(up to +120° C for 1 hour max. at threaded connector)

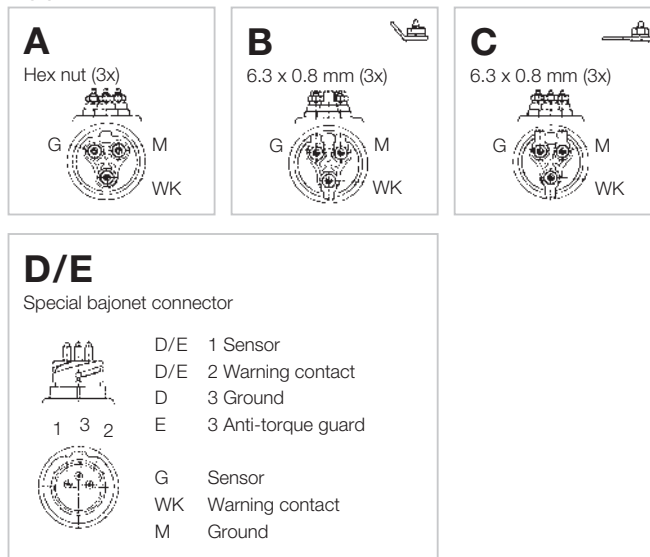
Resistance range:

10 Ω to 184 Ω

Dimensions



Type of Connection





Article No.



Article No.	Pressure Unit	Pressure Range	Thread	L1 (mm)	L2 (mm)	Mounting
360-081-039-002C	5	0.8 ±0.15	1/8 – 27 Dryseal NPTF	19.5	11	B
360-081-039-003C	10	0.8 ±0.15	1/8 – 27 Dryseal NPTF	19.5	11	B
360-081-039-004C	80 PSI	10 ±2.0 PSI	1/8 – 27 Dryseal NPTF	19.5	11	C
360-081-039-007C	10	1 ±0.15	M14 x 1.5	20.5	12	A
360-081-039-015C	5	0.25 ±0.15	1/8 – 27 Dryseal NPTF	19.5	11	B
360-081-063-001C	10	5.2 ±0.3	M12 x 1.5	20.5	12	D
360-081-063-003C	16	5.5 ±0.3	M18 x 1.5	20.5	12	D
360-081-064-001C	5	0.25 ±0.15	M18 x 1.5	20.5	12	D
360-081-064-004C	10	0.6 ±0.3	M18 x 1.5	20.5	12	D



Tightening Torques for Pressure Senders

Tightening Torques for Pressure Senders

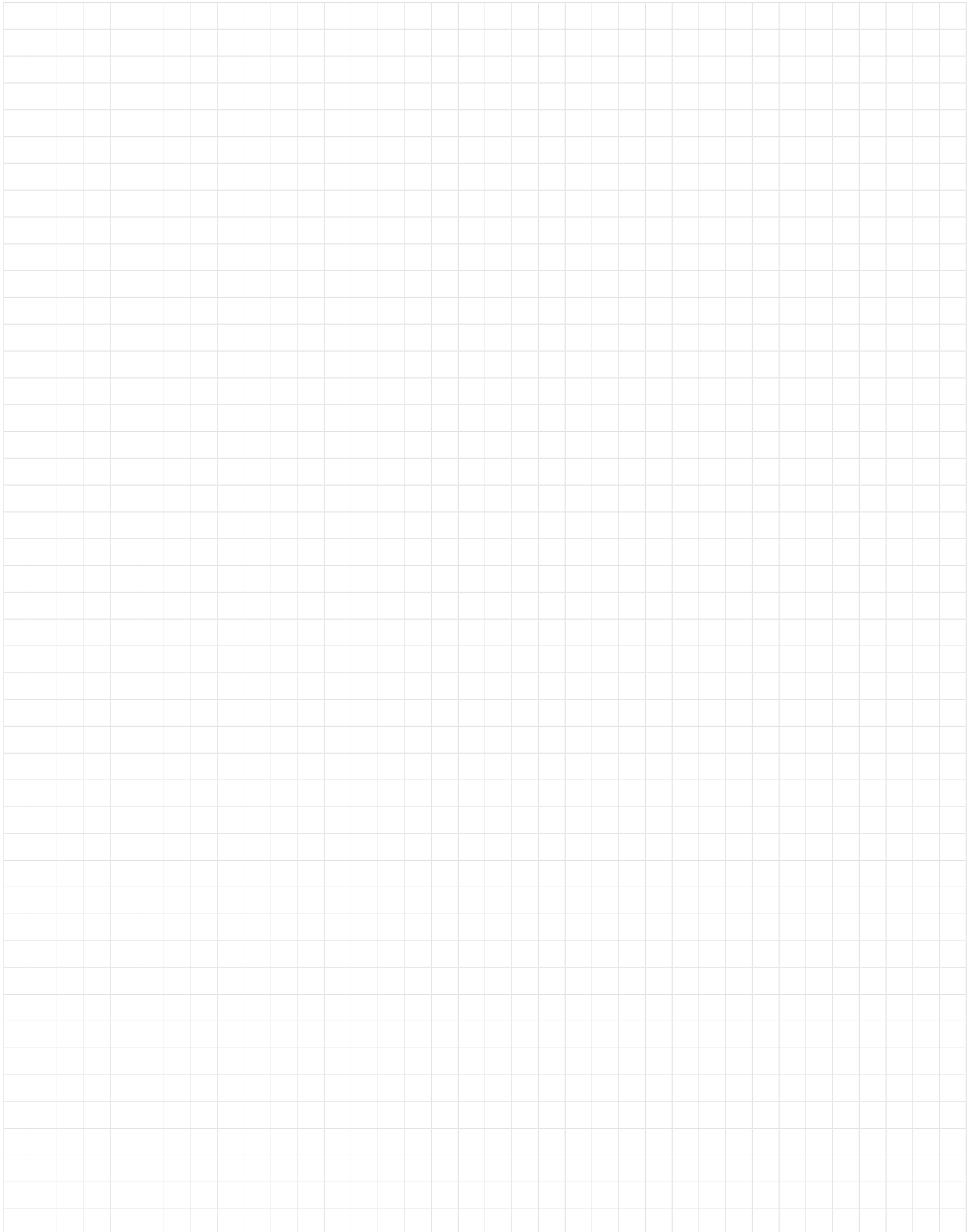
The values given in the following table for maximum tightening torque are exclusively based on the load capacity of the pressure sender (Nm max. Sender).

Prior to using the pressure sender, it is important to ask the relevant manufacturer of the vehicle, equipment system or engine for the maximum torque value of the threaded hole into which the pressure sender is to be screwed (Nm max. Installation Area).

Non-observance of the maximum tightening torque specified for the respective threaded hole can result in damage to the vehicle, engine or equipment system.

	Nm max. Sender
M10 x 1.0	30 Nm
1/8 in. BSPF	30 Nm
1/8 – 27 NPTF	30 Nm
R 1/8 DIN 2999	30 Nm
M12 x 1.5	40 Nm
M12 x 1.0	50 Nm
M14 x 1.5	60 Nm
1/4 in. BSPF	60 Nm
1/4 – 18 NPTF	60 Nm
3/8 – 18 NPTF	60 Nm
M16 x 1.5	80 Nm
3/8 – 18 Dryseal NPTF	80 Nm
M18 x 1.5	100 Nm







Pressure Switches

Common Ground or Insulated Return*

26

* Depending on connection



Common Ground or Insulated Return*

Technical Data

Rated voltage:

6 V to 24 V

Switching capacity:

5 W max. non-inductive

Switch point:

SF = Contact closes as pressure falls
 SS = Contact closes as pressure rises
 OF = Contact opens as pressure falls
 OS = Contact opens as pressure rises

Contacting mode:

Slow-acting

Contact chamber:

E = vented; D = unvented

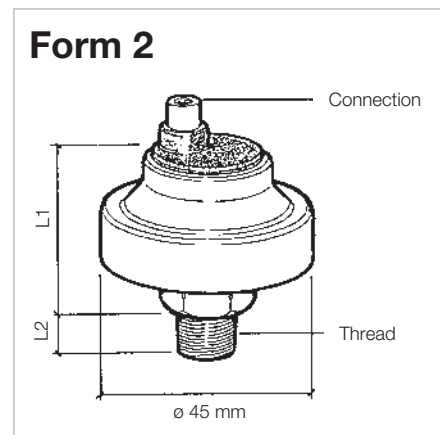
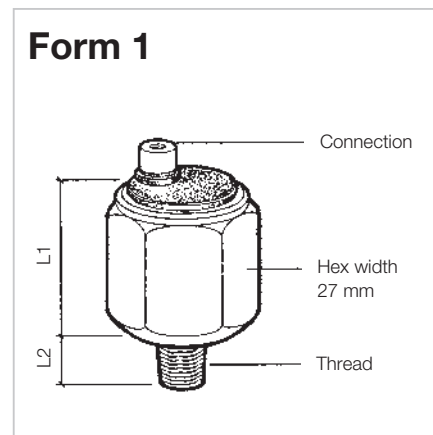
Overpressure safety:

15, 30, 40, 50 or 350 bar max.
 (short periods only for 2 sec)









Operating temperature:

-25° C to +140° C
 (up to +140° C for 1 hour max.
 at threaded connector)

Dimensions



Type of Connection

<p>A</p> <p>1-pole Common Ground Screw M4 x 5</p> 	<p>B</p> <p>1-pole Common Ground Screw M4 x 5 6.3 x 0.8 mm</p> 	<p>C</p> <p>1-pole Common Ground 6.3 x 0.8 mm riveted</p> 	<p>D</p> <p>1-pole Common Ground Screw M4 x 5 6.3 x 0.8 mm 50°/90°</p> 
<p>E</p> <p>Insulated Return Screw M4 x 5 (2x)</p> 	<p>F</p> <p>Insulated Return Screw M4 x 5 (2x) Connecting Eye (2x)</p> 	<p>G</p> <p>Insulated Return 6.3 x 0.8 mm riveted</p> 	<p>H</p> <p>1-pole Common Ground Connector pin ø 4 mm</p> 

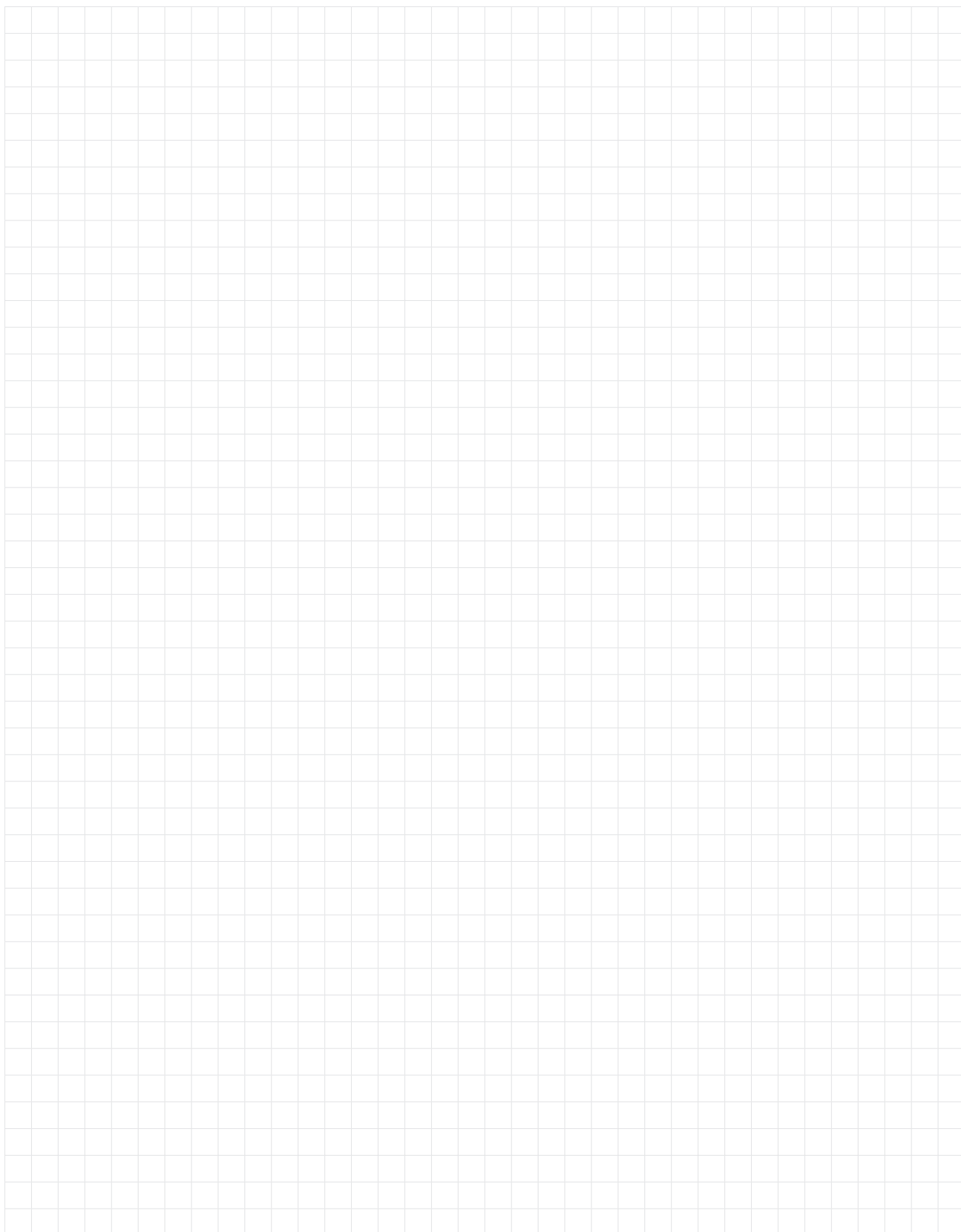
* Depending on connection



Article No.



230-112-001-001C	1 ±0.2	SS	M10 x 1 con. short	26	11	1	A	D
230-112-001-002C	10 +1.5 -2.0 PSI	SS	1/8 – 27 NPTF	26	11	1	A	D
230-112-001-004C	0.4 +0.3	SS	M10 x 1 con. short	26	11	1	A	D
230-112-001-005C	2.5 ±0.3	SS	M10 x 1 con. short	26	11	1	A	D
230-112-001-015C	0.9 ±0.15	OF	M10 x 1 con. short	26	11	1	A	D
230-112-002-001C	0.5 ±0.2	SS	1/8 – 27 NPTF	26	11	1	E	D
230-112-003-012C	6 +1.5 -2.0 PSI	SF	1/8 – 27 NPTF	26	11	1	A	D
230-112-003-013C	10 +1.5 -2.0 PSI	SF	1/8 – 27 NPTF	26	11	1	A	D
230-112-003-015C	0.5 ±0.1	SF	M10 x 1 con. short	26	11	1	A	E
230-112-003-022C	0.9 ±0.15	SF	M10 x 1 con. short	26	11	1	A	D
230-112-004-004C	2 +0.2 -0.1	SF	M10 x 1 con. short	26	11	1	C	D
230-112-005-001C	1 ±0.2	SF	M10 x 1 con. short	26	11	1	E	E
230-112-005-003C	1.8 ±0.2	SF	M10 x 1 con. short	26	11	1	F	E
230-112-005-004C	3 ±0.4	SF	M10 x 1 con. short	26	11	1	E	E
230-112-005-005C	0.8 ±0.2	SF	M10 x 1 con. short	26	11	1	E	E
230-112-005-006C	0.5 ±0.2	SF	M10 x 1 con. short	26	11	1	E	E
230-112-005-010C	7 ±2.0 PSI	SF	1/8 in. BSPF	26	10	1	E	E
230-112-005-011C	1.5 +0.2	SF	M10 x 1 taper con. short	26	11	1	F	E
230-112-005-012C	1.2 ±0.2	SF	M10 x 1,0	26	9	1	E	D
230-112-007-005C	0.3 ±0.15	OS	M14 x 1.5	24.5	12	1	G	E
230-113-001-004C	0.4 ±0.2	SF	M10 x 1 taper con. short	39	11	2	A	E
230-113-001-008C	5.4 ±0.2	SF	M12 x 1.5	39	12	2	C	D
230-213-001-011C	12 ±0.4	SF	1/8 – 27 NPTF	39	11	2	B	D
230-213-001-021C	8 ±0.5	SF	M10 x 1 taper con. short	39	11	2	A	D
230-213-002-001C	7 ±0.3	SF	1/8 – 27 NPTF	39	11	2	F	E
230-213-002-003C	10.5 ±0.3	SF	1/8 – 27 NPTF	39	11	2	F	E
230-213-002-004C	4.5 ±0.3	SF	M10 x 1 taper con. short	39	11	2	E	E





Temperature Senders

Without Warning Contact, Common Ground or Insulated Return	30
With Warning Contact, Common Ground	34
With 2 Measuring Points*	36
For Bimetal Indicating Instruments*	38
Air (VDO cockpit vision/VDO cockpit international)*	40
Air (VDO LCD cockpit)*	42
Tightening Torques for Temperature Senders*	44

* special



Without Warning Contact, Common Ground or Insulated Return*

Technical Data

Version:

Thermistor

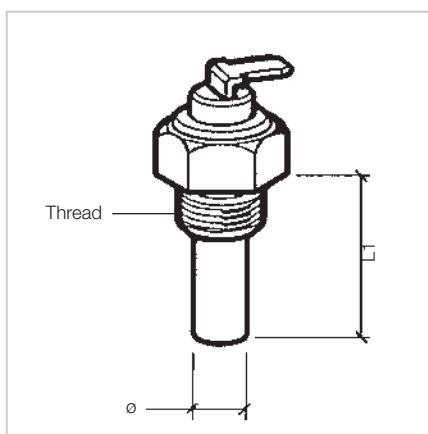
Rated voltage:

6 V to 24 V

Temperature response time:

3 minutes minimum after switching
on operating current

Dimensions



Type of Connection

A
1-pole Common
Ground
6.3 x 0.8 mm

B
1-pole Common
Ground
6.3 x 0.8 mm
90°

C
1-pole Common
Ground
6.3 mm
0.8 mm

D
1-pole Common
Ground
Hex nut
M4

E
1-pole Common
Ground
Knurled nut
M4


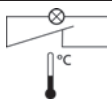




F
1-pole Common
Ground
Connector pin
ø 4 mm

G
Insulated Return
6.3 x 0.8 mm (2x)


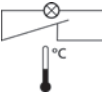

H
Insulated Return
Special push-on
connector (Bosch)
2.8 x 0.8 mm (2x)

* Depending on connection



Article No.							
	 °C	 °C	°C → Ω		 Ø mm	 L 1 mm	 A
323-801-001-006N	120	-	90 51.2 ± 5.3	M14 x 1.5	9	29	A
323-801-001-007N	120	-	90 51.2 ± 4.3	3/8 – 18 NPTF	9	29	A
323-801-001-008N	120	-	90 51.2 ± 4.3	5/8 – 18 UNF – 3A	9	29	A
323-801-001-009N	120	-	90 51.2 ± 4.3	1/4 – 18 NPTF	9	29	A
323-801-001-010K	120	-	90 51.2 ± 4.3	1/2 – 14 NPTF	9	29	A
323-801-001-010N	120	-	90 51.2 ± 4.3	1/2 – 14 NPTF	9	29	A
323-801-001-022N	120	-	90 51.2 ± 4.3	M18 x 1.5	9	29	A
323-801-001-026K	120	-	90 51.2 ± 4.3	M14 x 1.5	9	29	E
323-801-001-026N	120	-	90 51.2 ± 4.3	M14 x 1.5	9	29	E
323-801-001-029N	120	-	90 51.2 ± 4.3	M16 x 1.5	9	29	E
323-801-001-040N	120	-	90 51.2 ± 4.3	M16 x 1.5	9	29	A
323-801-001-054D	120	-	90 51.2 ± 5.3	M14 x 1.5	9	29	D
323-801-003-001D	200	-	160 32.2 ± 2.1	M10 x 1.5	6.9	22	C
323-801-004-002N	150	-	120 36.5 ± 2.7	M14 x 1.5	9	29	A
323-801-004-003D	150	-	120 36.5 ± 2.7	R 1/2	9	29	A
323-801-004-006D	150	-	120 36.5 ± 2.7	1/2 – 14 NPTF	9	29	D
323-801-004-007D	150	-	120 36.5 ± 2.7	1/2 – 14 NPTF	9	29	A
323-801-004-012C	150	-	120 36.5 ± 2.7	M16 x 1.5	9	29	E
323-801-004-017D	150	-	120 36.5 ± 2.7	1/4 – 18 NPTF	9	29	D
323-801-004-039D	150	-	120 36.5 ± 2.7	M14 X 1.5 Thread length 14	9	29	B
323-801-004-039K	150	-	120 36.5 ± 2.7	M14 X 1.5 Thread length 14	9	29	B
323-801-005-001D	120	-	90 51.2 ± 4.3	1/8 – 27 NPTF	8.5	22	C
323-801-005-005D	120	-	90 51.2 ± 5.3	M10 x 1,0	8.5	22	C
323-801-009-001D	150	-	120 36.5 ± 2.7	1/8 – 27 NPTF	8.2	22	C
323-801-009-003D	150	-	120 36.5 ± 2.7	M10 X 1 con. short	8.2	22	C
323-801-010-001D	150	-	120 36.5 ± 2.7	M10 x 1.5	6.9	22	C
323-801-010-003K	150	-	120 36.5 ± 2.7	M12 x 1.5	6.9	22	C
323-801-012-001D	150	-	120 36.5 + 4.0 -2.7	M16 x 1.5	9	15	B
323-801-012-002D	150	-	120 36.5 + 4.0 -2.7	M14 x 1.5	9	15	B
323-801-012-003D	150	-	120 36.5 + 4.0 -2.7	M18 x 1.5	9	15	B
323-801-013-001D	200	-	160 32.2 ± 2.1	1/8 – 27 NPTF	8.2 ± 0.2	22 ± 0.5	C
323-801-017-001K	120	-	90 51.2 ± 5.3	M10 X 1 con. short	without	10.5	C
323-801-017-001N	120	-	90 51.2 ± 5.3	M10 X 1 con. short	without	10.5	C
323-801-018-001D	200	-	160 32.2 ± 2.5	1/8 – 27 NPTF	without	10.5	C
323-801-020-002D	120	-	90 51.2 ± 4.3	M14 x 1.5	9	24	F



Article No.			$^{\circ}\text{C} \rightarrow \Omega$		\varnothing mm	L mm	A
323-803-001-062C	100	114 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	10.8 ±0.4	40 ±0.4	G
323-803-001-064C	100	112 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	10.8 ±0.4	40 ±0.1	G
323-805-001-001K	120	-	90 51.2 ±4.3	M14 x 1.5	11	29	G
323-805-001-001N	120	-	90 51.2 ±4.3	M14 x 1.5	11	29	G
323-805-001-002C	120	-	90 51.2 ±4.3	5/8 – 18 UNF-2A with taper seat	11	29	G
323-805-001-004N	120	-	90 51.2 ±4.3	1/2 – 14 NPTF	11	29	G
323-805-001-005N	120	-	90 51.2 ±4.3	3/8 – 18 Dryseal NPTF	11	29	G
323-805-001-015N	120	-	90 51.2 ±4.3	M18 x 1.5	11	29	G
323-805-003-001N	150	-	120 36.5 ±2.7	M14 x 1.5	11	29	G
323-805-003-002N	150	-	120 36.5 ±2.7	1/4 – 18 NPTF	11	29	G
323-805-003-003N	150	-	120 36.5 ±2.7	5/8 – 18 UNF-2A with taper seat	11	29	G
323-805-017-002C	120	-	100 40.10 ±0.8	M14 x 1.5	8.5 -0.3	29 -0.3	H
323-805-034-002B	130	-	90 426.2 ±17.6	M14 x 1.5	7.5	29	H
323-805-039-001C	130	-	90 3300 ±143	M14 x 1.5	8.5	29	H
323-805-042-001C	140	-	90 92.3 ±5.2	M14 x 1.5	8.5	29	H
323-809-019-003A	120	-	90 457.6 ±19.5	M18 x 1.5	13 ±0.2	35 ±0.6	H
325-805-003-001C	120	-	90 25.6 ±3	1/4 – 18 NPTF	10.9	29	G**
325-805-003-003C	120	-	90 25.6 ±3	3/8 – 18 NPTF	10.9	29	G**

* Depending on connection

** For dual-station readings





With Warning Contact, Common Ground

Technical Data

Version:

Thermistor

Rated voltage:

6 V to 24 V

Temperature response time:

3 minutes minimum after switching on operating current

Switching capacity:

1.2 W to 3 W non-inductive

Break point:

5° C max. below make point

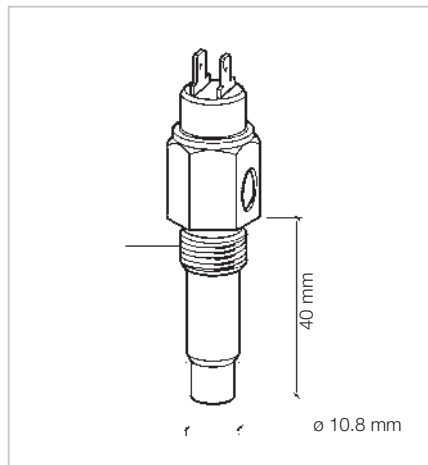
Contacting mode:

Slow-acting

Type of contact:

Switch closes as temperature rises

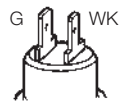
Dimensions



Type of Connection

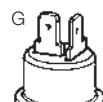
A

Blade connector
 WK: 4.8 x 0.8 mm
 G: 6.3 x 0.8 mm
 WK = Warning Contact
 G = Sensor



B

2 blade connectors arranged in the form of letter "T"
 G: 6.3 x 0.8 mm
 WK = Warning Contact
 G = Sensor



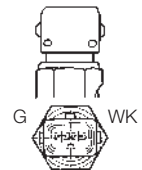
C

Special push-on connector (Kostal)
 ø 2.5 mm
 WK = Warning Contact
 G = Sensor








D

Special push-on connector (Bosch)
 2.8 x 0.8 mm
 WK = Warning Contact
 G = Sensor





Article No.					
323-803-001-001D	120	100 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-002D	120	98 ±3	90 51.2 ±4.3	5/8 – 18 NF-3	A
323-803-001-004D	120	90 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-006D	120	96 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-007D	120	110 ±3	90 51.2 ±4.3	M16 x 1.5	A
323-803-001-008D	120	110 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-009D	120	102 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-011D	120	95 ±3	90 51.2 ±4.3	5/8 – 18 NF-3	A
323-803-001-012D	120	100 ±3	90 51.2 ±4.3	5/8 – 18 NF-3	A
323-803-001-013D	120	106 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-016D	120	94 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-019D	120	95 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	A
323-803-001-020D	120	115 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-022D	120	118 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-023D	120	80 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-025D	120	103 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	A
323-803-001-026E	120	97 ±3	90 51.2 ±4.3	5/8 -18 UNF-3A	A
323-803-001-028D	120	98 ±3	90 51.2 ±4.3	M14 x 1.5	A
323-803-001-030D	120	100 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	A
323-803-001-032D	120	108 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	A
323-803-001-036D	120	103 ±3	90 51.2 ±4.3	5/8 – 18 NF-3	A
323-803-001-059D	120	105 ±3	90 51.2 ±4.3	5/8 – 18 NF-3	A
323-803-001-060D	120	105 ±3	90 51.2 ±4.3	1/2 – 14 NPTF	A
323-803-002-002D	150	120 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-002-007D	150	130 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-002-010C	150	135 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-002-015D	150	120 ±3	120 36.5 ±2.7	1/2 – 14 NPTF	A
323-803-002-016D	150	130 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-002-017D	150	120 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-002-019D	150	135 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-002-020D	150	110 ±3	120 36.5 ±2.7	M14 x 1.5	A
323-803-004-001D	120	100 ±2.5	90 51.2 ±4.3	M14 x 1.5	B
323-803-004-002D	120	105 ±3	90 51.2 ±4.3	M14 x 1.5	B
323-803-004-003D	120	95 ±2.5	90 51.2 ±4.3	M14 x 1.5	B
323-803-004-007D	120	100 ±6	90 51.2 ±4.3	M14 x 1.5	B
323-803-004-011D	120	105 ±3	90 51.2 ±4.3	M14 x 1.5	B
323-803-006-002C	150	130 ±4	120 36.5 ±2.7	M14 x 1.5	B
323-803-014-002D	150	130 ±3	130 28.9 ±1.5	M14 x 1.5	A
323-803-014-007C	150	108 ±3	120 36.8 ±2.2	M14 x 1.5	D



With 2 Measuring Points

Technical Data

Version:

Thermistor, 1-pole Common Ground

Rated voltage:

6 V to 24 V

Temperature response time:

3 minutes minimum after switching on operating current

Operating value:

– Operation with Indicating Instrument

210° C = 18.9 Ω ±1.3 Ω

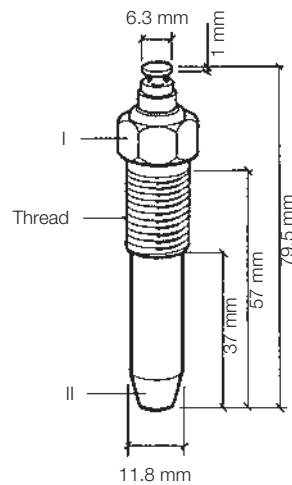
– Operation with Control Electronics

210° C = 20.05 Ω ±0.80 Ω

Dimensions

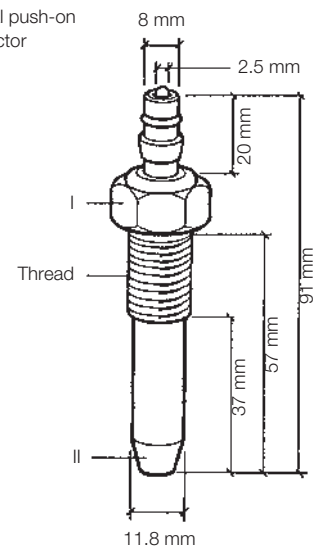
Form A

For spade connector









Form B

Special push-on connector





Article No.						
	 °C Operatior	 I	 °C Operatior	 II		 Form
323-801-028-001C	-40 ... +150		-40 ... +250		M14 x 1.5	A



For Bimetal Indicating Instruments

Technical Data

Version:

Thermistor, 1-pole Common Ground

Rated voltage:

6 V to 24 V

Temperature response time:

3 minutes minimum after switching on operating current

Operating value:

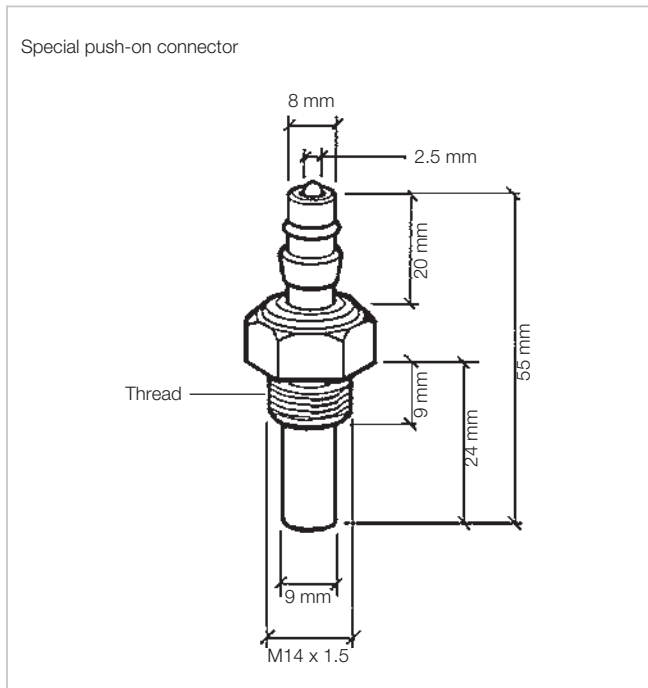
– Operation with Indicating Instrument

90° C = 86.7 Ω ±11.0 Ω



– Operation with Control Electronics

90° C = 102.0 Ω ±6.3 Ω

Dimensions





Article No.		
	 °C Operation	
323-804-004-010C	-45 ... +150	M14 x 1.5



Air (VDO cockpit vision/VDO cockpit international)

Technical Data

Version:

Thermistor

Rated voltage:

6 V to 24 V

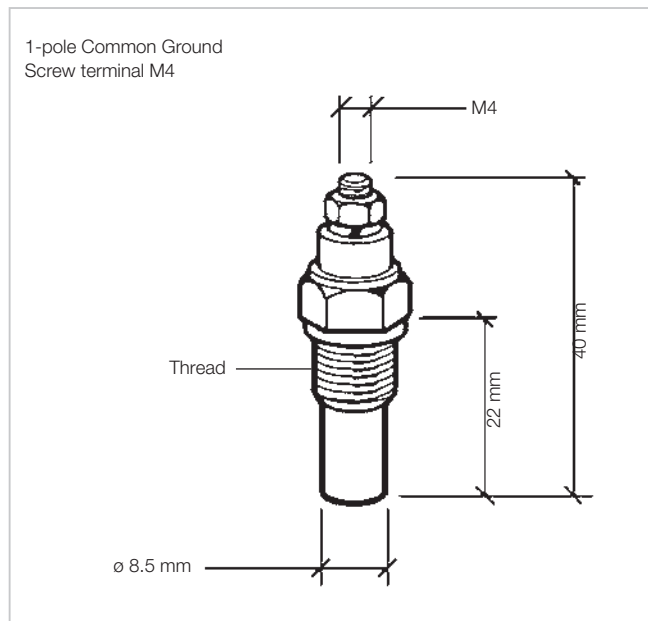
Operating temperature:

-25° C to +125° C max.

Temperature response time:

3 minutes minimum after switching on operating current

Dimensions





Article No.					
323-801-008-002D	120	-	0 1893 ±102		M10 x 1.0



Air (VDO LCD cockpit)

Technical Data

Version:

Thermistor, Insulated Return

Rated voltage:

Independent voltage

Operating temperature:

-40° C to +85° C max.

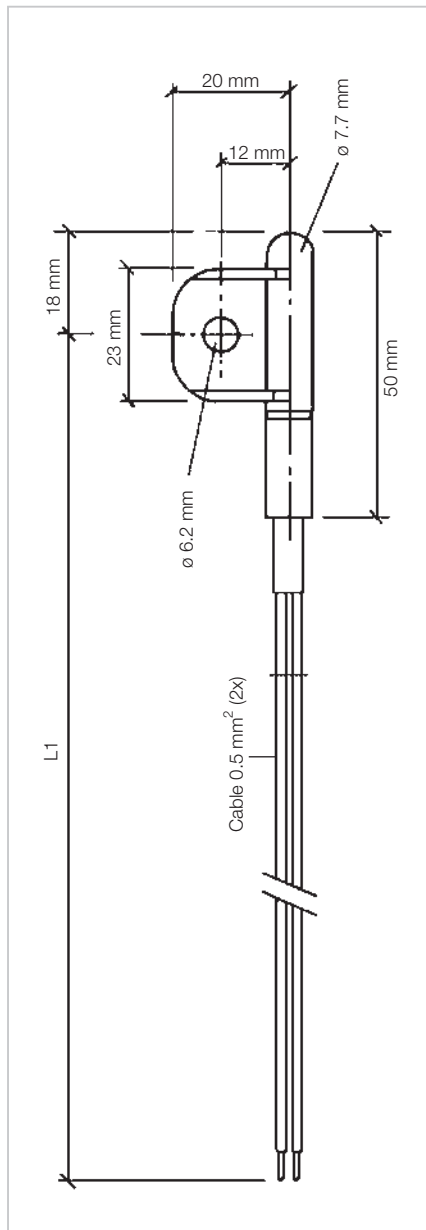
Temperature response time:

3 minutes minimum after switching on operating current


Operating values:

0° C = 4082 Ω ±26 Ω

Dimensions





Article No.				
		Cable Colour [+]	Cable Colour [-]	Housing Colour
323-809-010-005C	3000	green	brown	grey




Tightening Torques for Temperature Senders

Tightening Torques for Temperature Senders

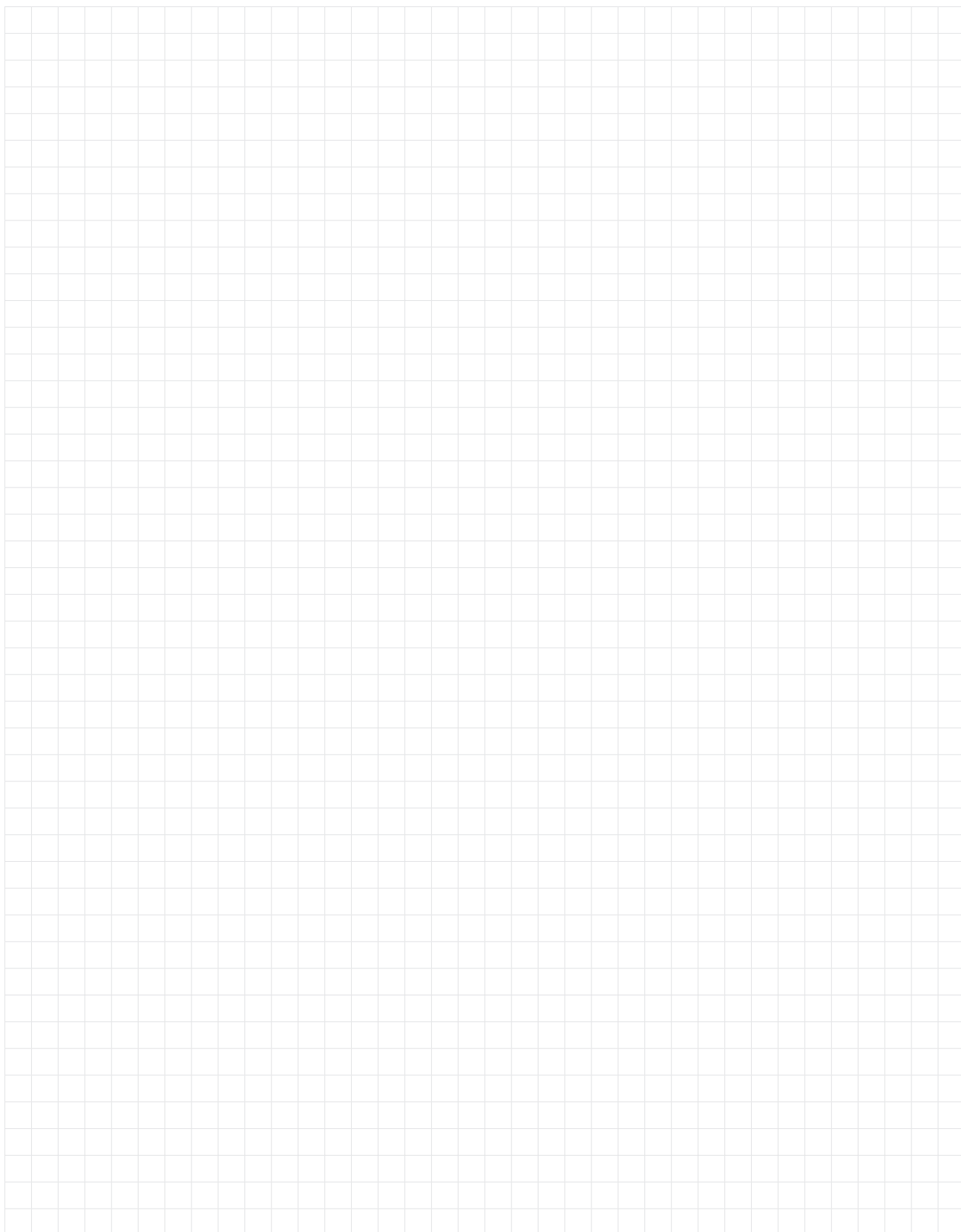
The values given in the following table for maximum tightening torque are exclusively based on the load capacity of the temperature sender (Nm max. Sender).

Prior to using the temperature sender, it is important to ask the relevant manufacturer of the vehicle, equipment system or engine for the maximum torque value of the threaded hole into which the temperature sender is to be screwed (Nm max. Installation Area).

Non-observance of the maximum tightening torque specified for the respective threaded hole can result in damage to the vehicle, engine or equipment system.

	Nm max. Sender
M10 x 1.0	10 Nm
1/8 – 27 NPTF	10 Nm
M12 x 1.5	15 Nm
01.02.2020	15 Nm
M14 x 1.25	20 Nm
M14 x 1.5	20 Nm
1/4 – 18 NPTF	20 Nm
1/2 in. – 20 Whit. S	20 Nm
5/8 – 18 UNF-3A	20 Nm
M16 x 1.5	30 Nm
M18 x 1.5	30 Nm
M20 x 1.5	30 Nm
M22 x 1.5	30 Nm
M24 x 1.5	30 Nm
M26 x 1.5	30 Nm
3/8 – 18 NPTF	30 Nm
3/8 – 18 Dryseal NPTF	30 Nm
1/2 – 14 NPTF	30 Nm
3/4 – 16 UNF-3A	30 Nm
R 3/8	30 Nm
R 1/2	30 Nm







Temperature Switches

Typ A: 1.2–3 W, Common Ground	48
Typ B: 100/120 W, Insulated Return	52



Type A: 1.2–3 W, Common Ground

Technical Data

Rated voltage:

6 V to 24 V

Switching capacity:

1.2 W to 3 W non-inductive

Type of contact:

SS = Contact closes as temperature rises
OS = Contact opens as temperature rises

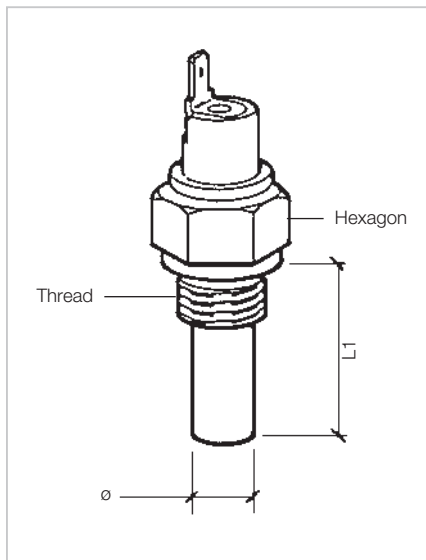
Contacting mode:

Slow-acting

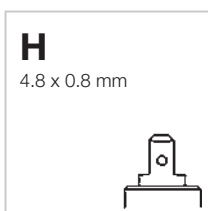
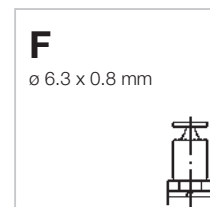
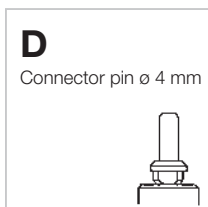
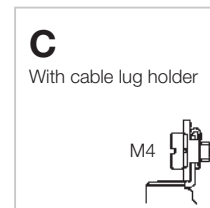
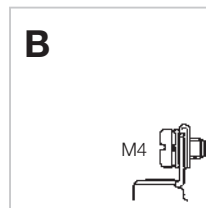
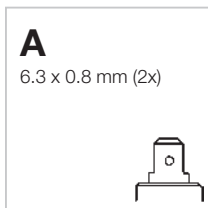
Break point:

5° C max. below make point

Dimensions



Type of Connection





Article No.							
232-011-005-003D	90 ± 3	SS	120	M10 x 1.5	6.9	38.5	E
232-011-005-004D	170 ± 5	SS	220	M10 x 1.5	6.9	38.5	E
232-011-005-015D	130 + 10	SS	180	M10 x 1.5	6.9	38.5	E
232-011-005-017D	150 ± 5	SS	200	M10 x 1.5	6.9	38.5	E
232-011-005-019D	96 ± 3	SS	120	1/8 – 27 NPTF	6.9	33	E
232-011-005-027D	150 ± 5	SS	200	M10 x 1.5	6.9	38.5	F
232-011-005-028D	170 ± 5	SS	220	M10 x 1.5	6.9	38.5	F
232-011-005-030D	185 ± 5	SS	230	M10 x 1.5	6.9	38.5	F
232-011-017-004D	140 + 10	SS	160	M14 x 1.5	10	29	A
232-011-017-005D	120 ± 3	SS	130	1/2 – 14 NPTF	10	29	B
232-011-017-010D	110 ± 3	SS	160	M14 x 1.5	10	29	A
232-011-017-016D	95 ± 3	SS	150	M14 x 1.5	10	29	A
232-011-017-017D	85 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-032D	120 ± 3	SS	130	M14 x 1.5	10	29	A
232-011-017-033D	92 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-034D	100 ± 3	SS	160	M14 x 1.5	10	29	A
232-011-017-037D	105 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-038D	55 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-041D	105 ± 3	SS	120	1/2 – 14 NPTF	10	29	A
232-011-017-076D	115 ± 3	SS	130	M14 x 1.5	10	29	A
232-011-017-078D	80 ± 3	SS	120	M14 x 1.5 con. short	10	29	A
232-011-017-080D	97 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-087D	40 ± 3	SS	120	M14 x 1.5	10	29	D
232-011-017-089D	95 ± 3	SS	120	M18 x 1.5	10	29	A
232-011-017-099D	98 ± 3	SS	120	5/8 – 18 UNF-2A	10	29	A
232-011-017-103D	130 ± 3	SS	150	M14 x 1.5	10	29	A
232-011-017-128D	55 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-129D	35 ± 3	SS	120	M14 x 1.5	10	29	A
232-011-017-135D	102 ± 3	SS	150	M14 x 1.5	9.7	29	D
232-011-017-139D	103 ± 3	SS	120	3/8 – 18 NPTF	10	29	A



Article No.



Article No.	Dimension 1	Material	Temperature	Thread	Dimension 2	Dimension 3	Dimension 4
232-011-017-141D	28 ±3	SS	120	M14 x 1.5	9.7	29	A
232-011-017-143D	120 ±3.3	SS	150	3/4 – 16 UNF-2A	9.7 ±0.2	27.1 ±0.3	A
232-011-017-145D	105 ±3	SS	120	3/8 – 18 NPTF	10	29	H
232-011-017-147D	94 ±3	SS	150	M14 x 1.5	9.7	29	D
232-011-017-148D	35 ±3	SS	120	M14 x 1.5	9.7	29	A
232-011-019-003D	195 +10	SS	250	M10 x 1.5	6.9	38.5	E
232-011-020-006E	25 ±3	OS	120	M14 x 1.5	10	29	D
232-011-020-022E	16 ±3	OS	120	M14 x 1.5	10	29	D





Type B: 100/120 W, Insulated Return

Technical Data

Rated voltage:

6 V to 12 V

Switching capacity:

100/120 W

Make point:

Contact closes as temperature rises

Break point:

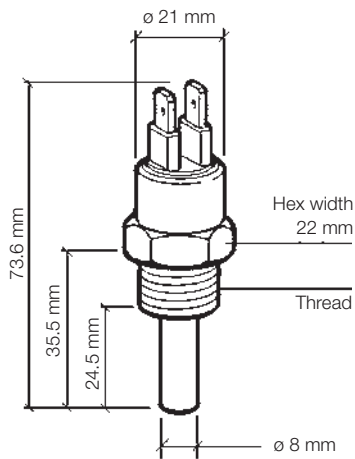
Contact opens as temperature falls

2-blade connection:

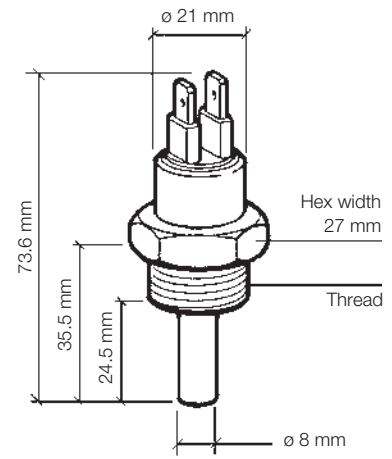
A6.3 x 0.8 DIN 46244

Dimensions

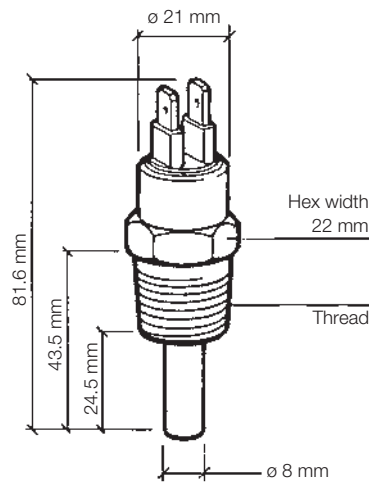
Form A



Form B



Form C



* Switching capacity 100 W

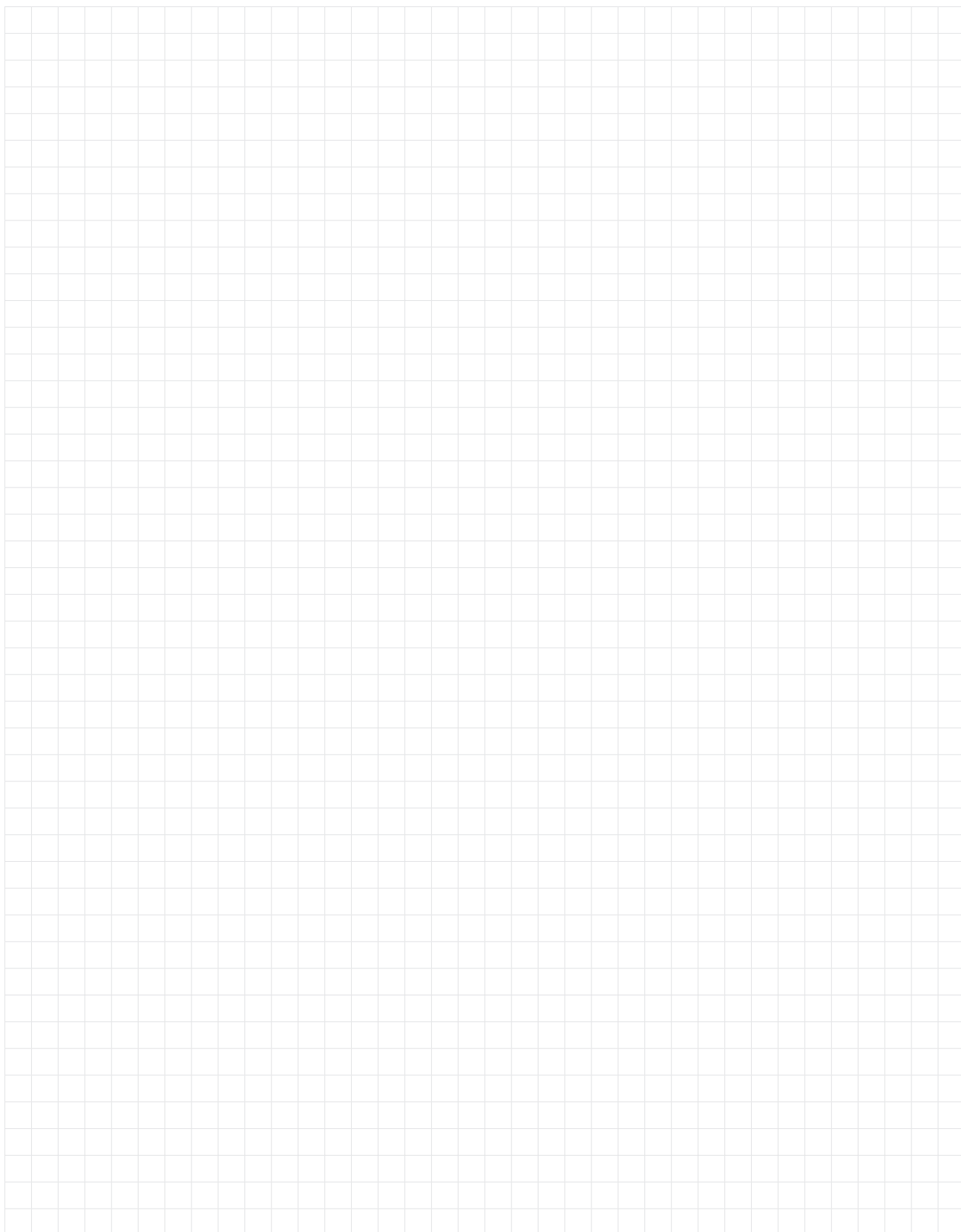
** Switching capacity 120 W



Article No.



X10-232-001-001**	64 ±3	60 ±3	110	M14 x 1.5	A
X10-232-001-002*	82 ±3	74 ±3	110	M18 x 1.5	A
X10-232-001-003*	86 ±3	81 ±3	110	M18 x 1.5	A
X10-232-001-004*	92 ±3	85 ±3	110	M18 x 1.5	A
X10-232-001-005*	96 ±3	92 ±3	110	M18 x 1.5	A
X10-232-001-006*	96 ±3	91 ±3	110	1/2 – 14 NPTF	C
X10-232-001-007*	96 ±3	92 ±3	110	M14 x 1.5	A
X10-232-001-008*	96 ±3	92 ±3	110	M22 x 1.5	B
X10-232-001-009*	100 ±3	95 ±3	110	M18 x 1.5	A
X10-232-001-010*	105 ±3	100 ±3	110	M18 x 1.5	A





RPM and Speed Senders

Blocking-Oscillator Senders	56
Frequency-Generator Senders	58
Generator-Type Senders	60
Hall-Effect Senders	62
Inductive Senders	64



Blocking-Oscillator Senders

Technical Data

Electrical connection:

4-pole, Insulated Return

Sensor supply:

- Voltage: 8 V to 15 V or 30 V
- Current: 12 mA or 14 mA

Operating temperature:

-40° C to +130° C

Duty cycle:

$(t_{on} + t_{off})/t_{on} = 1.43$ to 3.33

Teeth sequence frequency:

400 Hz

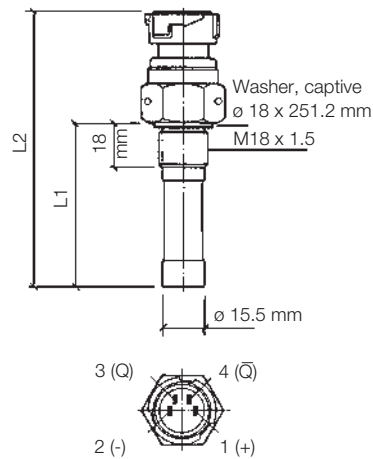
Distance sensor – pulse wheel:

0.3 mm to 1.4 mm

Dimensions

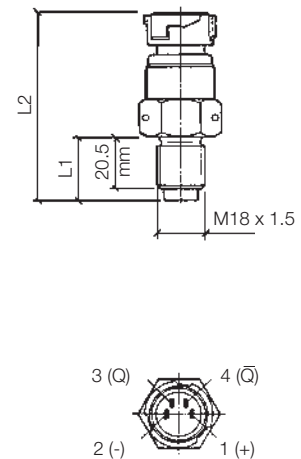
Form A

Bayonet connector
Blade connector 3 x 0.8 mm (4x)



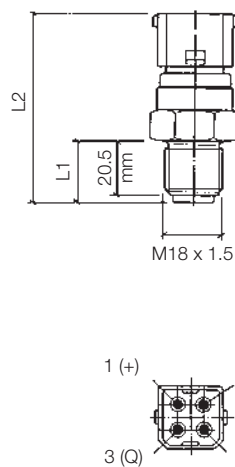
Form B

Bayonet connector
Blade connector 3 x 0.8 mm (4x)



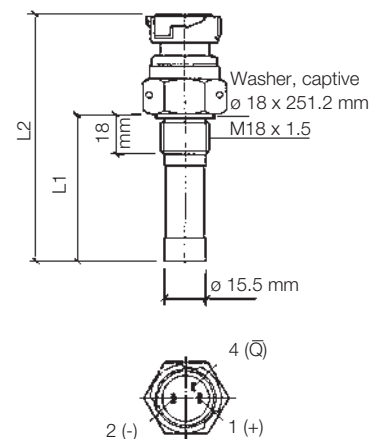
Form C

Special push-on connector








Form D

Bayonet connector
Blade connector 3 x 0.8 mm (3x)





Article No.							
	Operation V						
340-216-005-001C	8–15*	M18 x 1.5	90.2	133	A		4-pole
340-216-005-002C	8–15*	M18 x 1.5	63.2	106	A		4-pole
340-216-008-004Z	6.3–8*	M18 x 1.5	115.2	162.2 ±1	n/a		4-pole special
340-216-008-010Z	6.3–8*	M18 x 1.5	25	78.6 ±1	n/a		4-pole special
340-216-010-002Z	6.3–8*	M18 x 1.5	90.2 ±0.2	137.2 ±1	n/a		4-pole special
340-216-010-003C	8–15*	M18 x 1.5	25	79	C		4-pole
340-216-010-004C	21.5–30**	M18 x 1.5	90.2	133 ±1	n/a		3-pole

* into 12 V vehicle electrical system with voltage stabilizer (8 V)

** into 24 V vehicle electrical system with voltage stabilizer (24 V)



Frequency-Generator Senders

Technical Data

Rated voltage:

Independent voltage

Electrical connection:

2-pole, Insulated Return

Operating temperature:

-25° C to +100° C

Driving torque:

30 pcm max.

Rotational speed:

3000 min⁻¹ max.

Number of cycles:

6

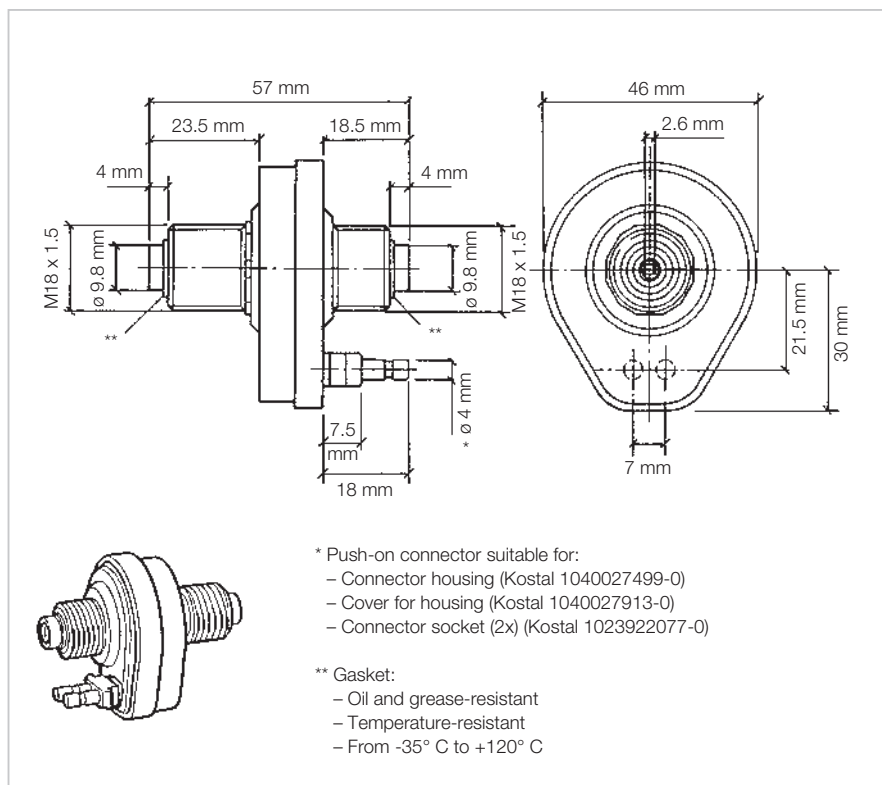
Resistance:

75 Ω ±5 Ω


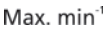


Frequency:

100 Hz /1000 min⁻¹

Dimensions





Article No.				
	 Pulses/Revolution	 Max. min ⁻¹		
340-811-001-003B	6	3000	2 x M18 x 1.5	Push-on – 2-pole



Generator-Type Senders

Technical Data

Electrical connection:

2-pole or 3-pole, Insulated Return

Driving torque:

500 pcm max.

Rotational speed:

3000 min⁻¹ max.

No-load voltage:

19.3 V at 2000 min⁻¹

Voltage tolerance:

±1 % at nominal value at +20° C

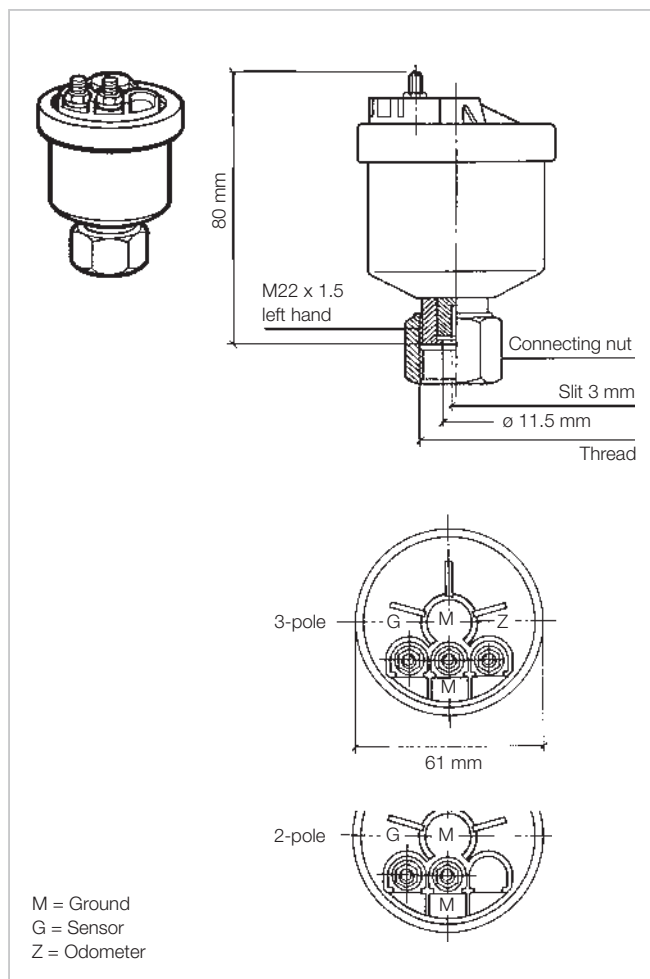
Operating temperature:

-25° C to +90° C



Protection:

IP54 acc. to DIN 40050

Dimensions





Article No.				
	Operation V	Max. min ⁻¹		
340-807-001-001C	19.3/2000 min ⁻¹	3000	M22 x 1.5	Screw – 3-pole
340-807-001-003C	19.3/2000 min ⁻¹	3000	7/8 – 18 NS-2B	Screw – 2-pole
340-808-001-001C	19.3/2000 min ⁻¹	3000	7/8 – 18 UNS	Screw – 2-pole
340-808-001-002C	19.3/2000 min ⁻¹	3000	M22 x 1.5	Screw – 2-pole
340-808-001-002G	19.3/2000 min ⁻¹	3000	M22 x 1.5	Screw – 2-pole
340-808-001-004G	19.3/2000 min ⁻¹	3000	7/8 – 18 NS-2A, left hand	Screw – 2-pole



Hall-Effect Senders

Technical Data

Electrical connection:

3-pole, Insulated Return

Sensor supply:

– Voltage: 10.8 V to 16 V

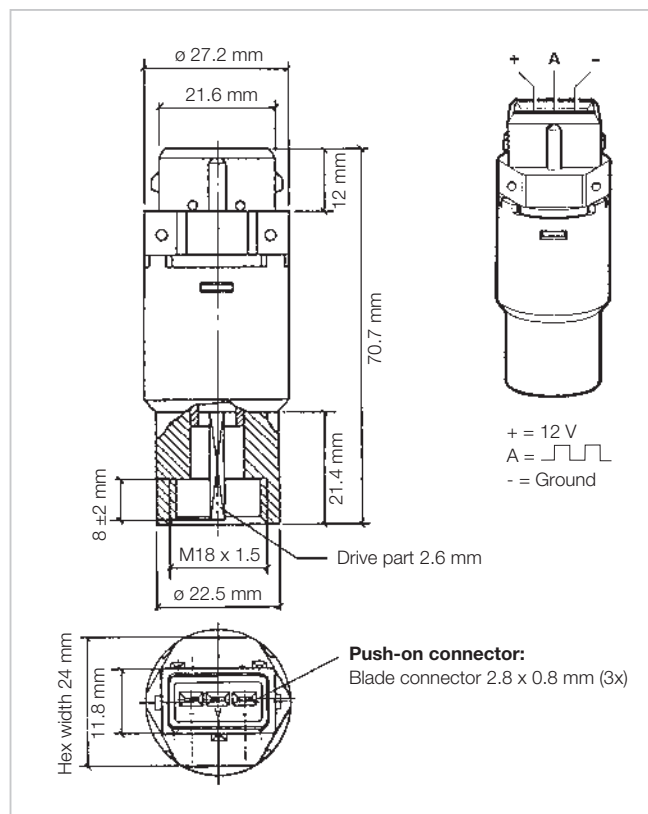
– Current: 13 mA

Operating temperature:




–30° C to +130° C

Response time: $t_r = 10 \mu\text{s}$, $t_f = 10 \mu\text{s}$ **Rotational speed:**3500 min⁻¹ max.**Duty cycle:** $(t_{\text{on}} + t_{\text{off}})/t_{\text{on}} = 1.25$ to 5**Protection:**IP57 acc. to DIN 40050
(with sealed transmission and electrical connection only)

Dimensions





Article No.					
	Operation V	Pulses/Revolution 	Max. min ⁻¹		
340-214-013-001C	10.8–16	4	4500	M18 x 1.5	Push-on – 3-pole
X10-340-006-001	4.5–28	8	5000	M22 x 1.5	n/a



Inductive Senders

Technical Data

Electrical connection:

2-pole, Insulated Return

Rated voltage:

Independent voltage

Operating temperature:

-25° C to +140° C or
-30° C to +140° C or
-40° C to +100° C

Interior resistance:

Ri 1480 Ω ±197 Ω or
Ri 1050 Ω ±100 Ω

Test voltage:

500 V

Insulating resistance:

500 kΩ

Test conditions:

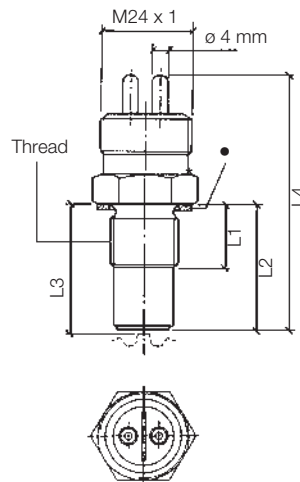
- Gear: 36 teeth
- Module: 2.75
- Rotational speed: 416.6 min⁻¹
- Frequency: 250 Hz
- Toothed width: 7.5 mm
- Charge: 47 kΩ
- Gear seated in centre

Dimensions

Form A

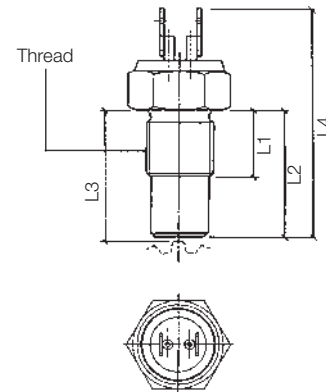
Special push-on connector (Kostal)

- **Special feature:** with washer, captive



Form B

Blade connector
6.3 x 0.8 mm (2x)



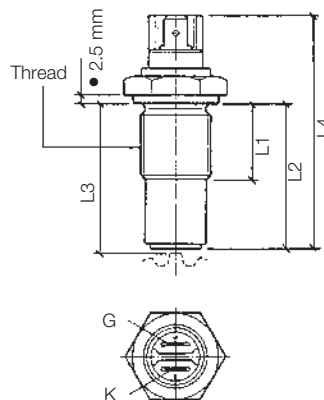
Form C1

Blade connector
G = 6.3 x 0.8 mm, WK = 6.3 x 0.8 mm

Form C2

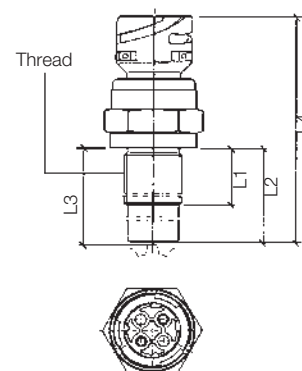
Blade connector
G = 4.8 x 0.8 mm, WK = 6.3 x 0.8 mm

- **Special feature:** with shoulder










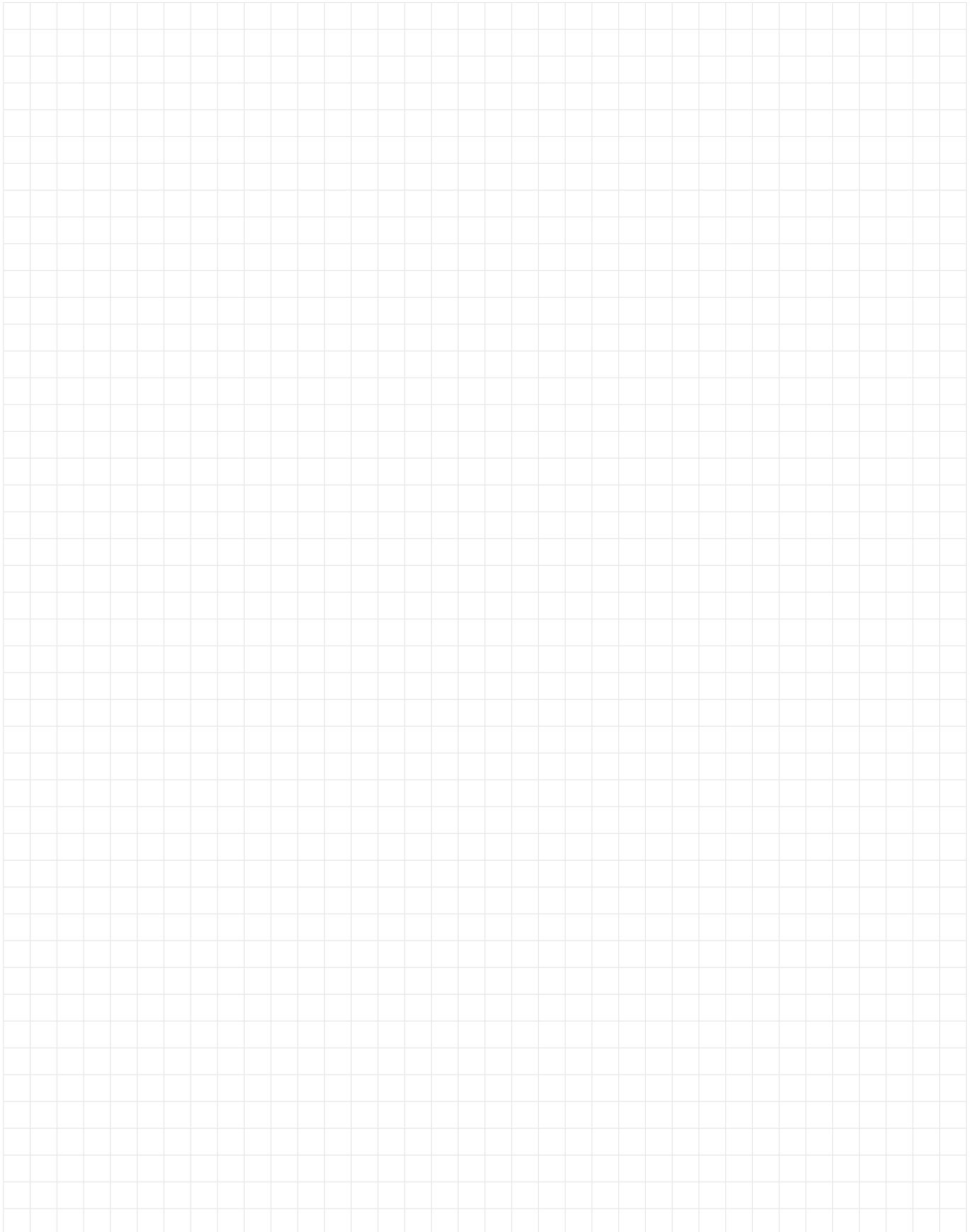
Form F

Plug-in connection
DIN 72 585 A1-4,1-Ag/K2





Article No.							
340-804-005-001C	M18 x 1.5	18	35	36.15–35.8	71.5	A	2-pole
340-804-005-002C	M18 x 1.5	24.9	26.5	27.65–27.3	63	A	2-pole
340-804-005-007C	M18 x 1.5	15	35	36.1 ± 0.1	71.5	A	2-pole
340-804-005-013A	M18 x 1.5	18	71.4	72.625–72.2	107.9	A	2-pole
340-804-005-015C	M18 x 1.5	18	99.1	101.15–100.55	135.6	A	2-pole
340-804-005-018C	M18 x 1.5	18	45.7	46.95–46.45	82.2	A	2-pole
340-804-005-020C	M18 x 1.5	18	37.3	38.45–38.1	73.8	A	2-pole
340-804-005-028C	M18 x 1.5	24.9	63.4	64.55–64.2	99.9	A	2-pole
340-804-006-007C	M18 x 1.5	33	34	35.1 ± 0.1	62	B	2-pole
340-804-007-001C	M18 x 1.5	33	34	35.1 ± 0.1	70	C1	2-pole
340-804-007-002A	M18 x 1.5	27.5	28.5	29.6 ± 0.1	70	C1	2-pole
340-804-007-003C	M18 x 1.5	33	34	35.1 ± 0.1	64.5	B	2-pole
340-804-007-004C	3/4 – 16 UNF-2A	27.5	28.5	29.6 ± 0.1	70	C1	2-pole
340-804-007-011C	M18 x 1.5	33	34	35.1 ± 0.1	70	C1	2-pole
340-804-007-011G	M18 x 1.5	33	34	35.1 ± 0.1	70	C1	2-pole
340-804-007-013C	M18 x 1.5	27.5	28.5	29.6 ± 0.1	70	C1	2-pole
340-804-007-019C	M18 x 1.5	18.2	70.7	71.8 ± 0.1	79.7	C2	2-pole
340-804-007-020C	M18 x 1.5	20	39	40.1 ± 0.1	62	C2	2-pole
340-804-030-005B	M18 x 1.5	23.3	25 ± 0.1	25 ± 0.1	67 ± 1	n/a	2-pole special
340-804-030-006B	M18 x 1.5	18.2	70.7 ± 0.1	70.7 ± 0.1	93.5 ± 1	n/a	2-pole special
340-804-032-001Z	n/a	n/a	n/a	n/a	n/a	n/a	2-pole
340-804-077-006Z	n/a	n/a	n/a	n/a	n/a	n/a	2-pole
340-804-077-010Z	n/a	n/a	n/a	n/a	n/a	n/a	2-pole
340-804-077-011Z	n/a	n/a	n/a	n/a	n/a	n/a	2-pole





Lever-Type Senders

Insulated Return*	68
Insulated Return (adjustable)*	72
Common Ground or Insulated Return (special)*	74

* Without warning contact



Without Warning Contact, Insulated Return

Technical Data

Rated voltage:

6 V to 24 V, Insulated Return

Resistor:

3 Ω (empty) to 180 Ω (full)

Current:

20 mA to 120 mA

Operating temperature:

-30° C to +70° C

Ventilation or bleeder values:

- Overpressure to 200 mbar corresponds to a flow rate quantity < 25 g/min diesel fuel.
- Overpressure > 300 mbar corresponds to a flow rate quantity > 25 g/min diesel fuel.
- Vacuum 10–20 mbar corresponds to a flow rate quantity > 1.75 l/h diesel fuel.

Life:

1 million travel changes "full/empty" in Super (98 Oktan) unleaded fuel.

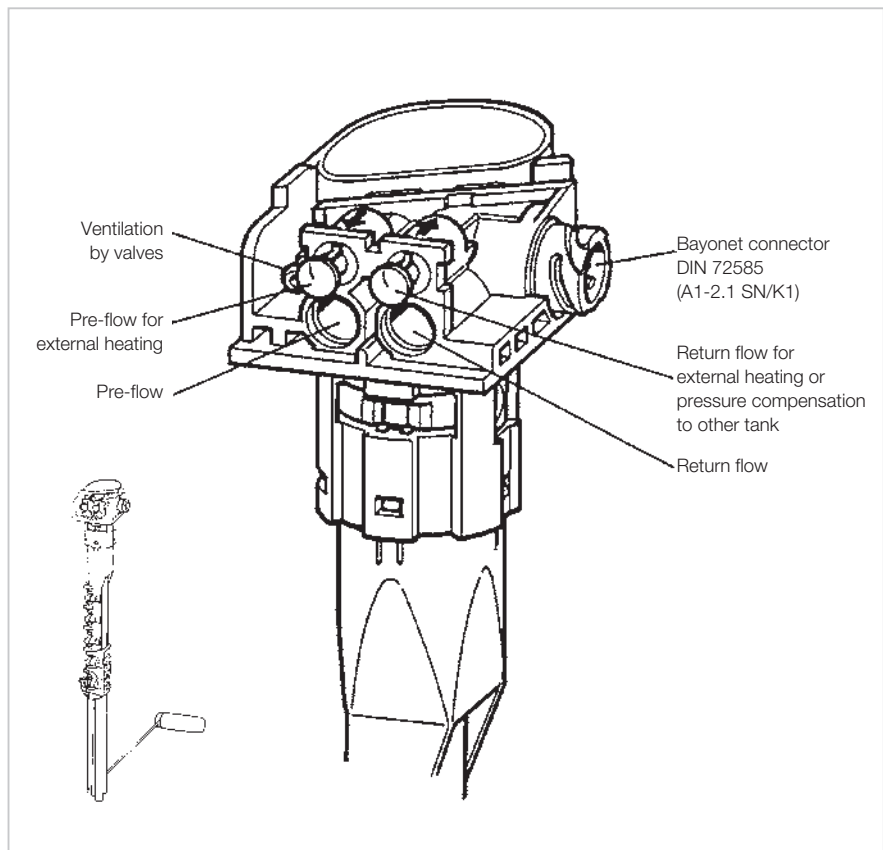
Vibrational load:

- 20–50 Hz PSD = 0.03g²/Hz
 - 50–1000 Hz PSD = -6 dB/Oct.
 - 8 h/axle line
- (PSD = Power spectral density)

Material:

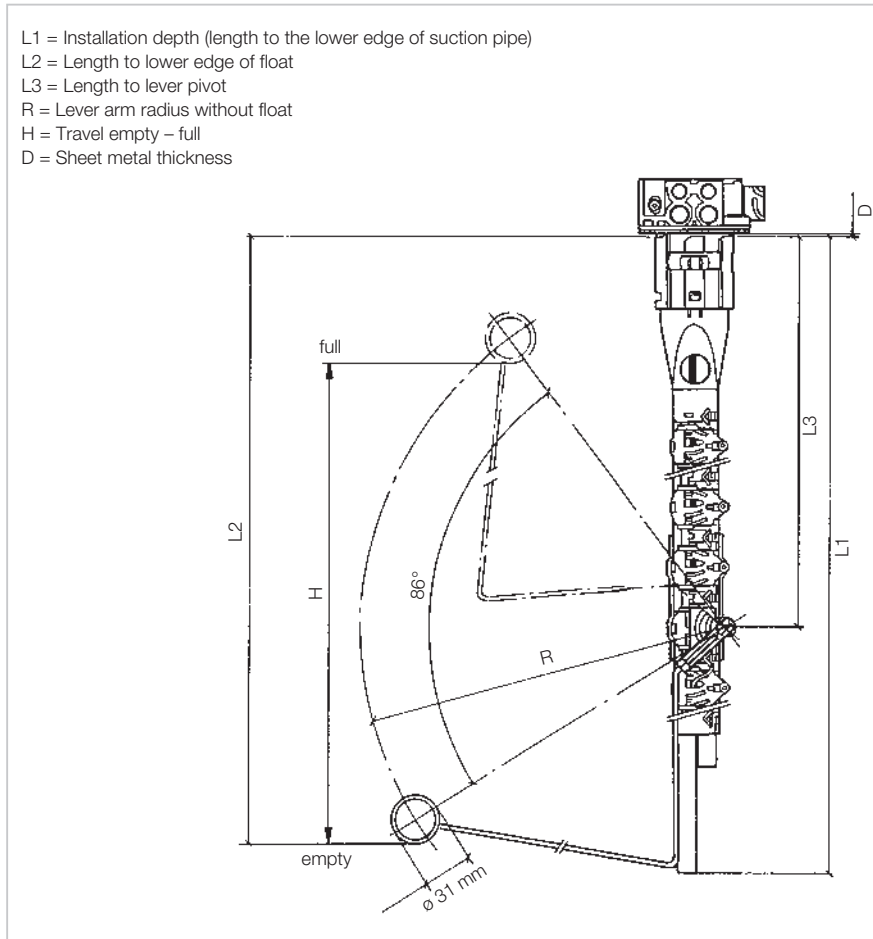
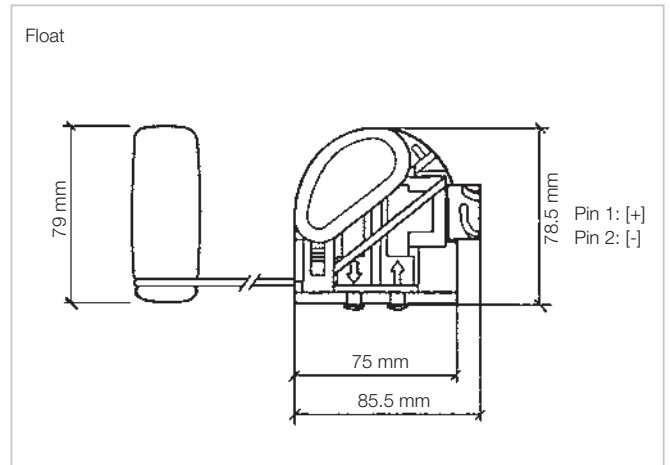
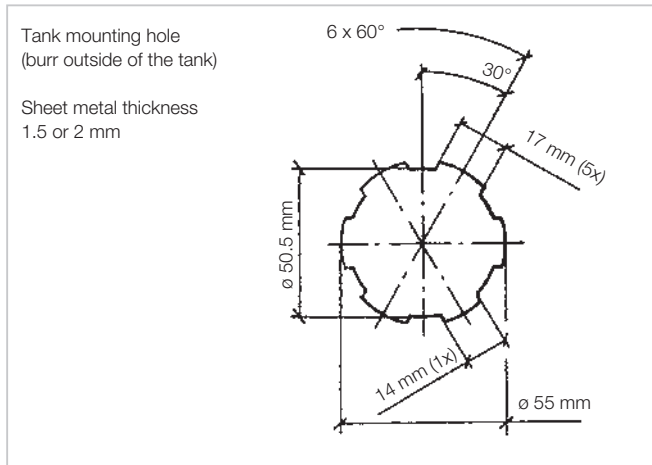
- Flange, sensor casing and float (POM-C)
- Float (X12CrNi 177k)
- Pipe (PA11 or PA12)

Dimensions

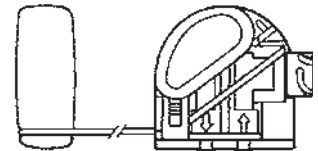




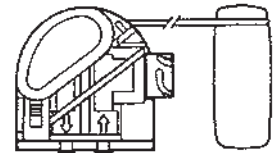
Dimensions



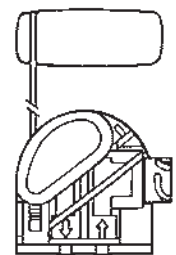
Form A



Form B



Form C





Article No.

|--|--|--|--|--|--|--|--|--|--|

221-824-054-049C	405	180	3	393	274	238	310	1.5	B
221-824-054-050C	450	180	3	402	232	269	363	1.5	A
221-824-054-051C	492	180	3	482	190	325	430	1.5	C
221-824-054-052C	611	180	3	568	316	385	523	2	C
221-824-054-053C	568	180	3	485	274	311	423	2	A
221-824-054-054C	670	180	3	625	316	418	570	1.5	C
221-824-054-055C	670	180	3	670	316	463	630	1.5	C
221-824-054-056C	535	180	3	537	232	374	506	1.5	C
221-824-055-001Z	292	19 ± 2.5	270 ± 5	289	157	284 ± 4	248	25 ± 0.5	B
221-825-011-137C	707	180 ± 12	3 ± 3	707	346.5 ± 1	424 ± 4	568	n/a	B
221-825-018-019Z	483 ± 2.5	10 ± 3	180 ± 12	450	186.5 ± 2	290 ± 4	378	2	A
221-825-018-046Z	576 ± 2.5	180 ± 12	3 ± 3	485	249.5 ± 2	310 ± 4	422.5	1.5	A
221-825-018-056Z	600 ± 2.5	180 ± 12	3 ± 3	542.5	316.5 ± 2	350 ± 4	474	2	A
221-825-018-096Z	483 ± 2.5	10 ± 3	180 ± 12	450	186.5	290 ± 4	378	2	A
221-825-018-112Z	634 ± 2.5	10 ± 3	180 ± 12	615.5	260	406 ± 4	536.5	n/a	A
221-825-023-009C	519 ± 2	180 ± 12	10 ± 3	501	249.5 ± 2	328 ± 4	447.5	1.5	C
221-826-014-001Z	629 ± 2.5	7 ± 4	330 ± 15	604 ± 5	326.5 ± 2	386 ± 4	526	n/a	A
221-826-014-006Z	470 ± 2.5	7 ± 4	330 ± 15	460 ± 5	249.5 ± 2	293.5 ± 4	400	n/a	A
221-826-014-012Z	630 ± 3	7 ± 4	330 ± 15	604 ± 5	326.5 ± 2	386 ± 4	526	2	A
221-839-001-014Z	150	189 + 12	6 - 4	150	38 ± 0.5	129 ± 2	150	n/a	n/a
221-839-002-004Z	150	189 + 12	6 - 4	150	62 ± 2	129 ± 2	150	n/a	n/a



Accessory Parts

Article No.	Product	Packaging Quantity
89-356-017	O-ring (Sealing)	50
X11-221-001-002	Adapter for pre-flow/return flow	20
X11-221-001-003	Latch for pre-flow/return flow or external heating	10
X11-221-001-004	Adapter for external heating	20



Without Warning Contact, Insulated Return (adjustable)

Technical Data

Rated voltage:

6 V to 24 V, Insulated Return

Resistor:

- empty: $3 \Omega \pm 1.5 \Omega$
- full: $180 \Omega \pm 12 \Omega$

Operating temperature:

-20° C to +65° C

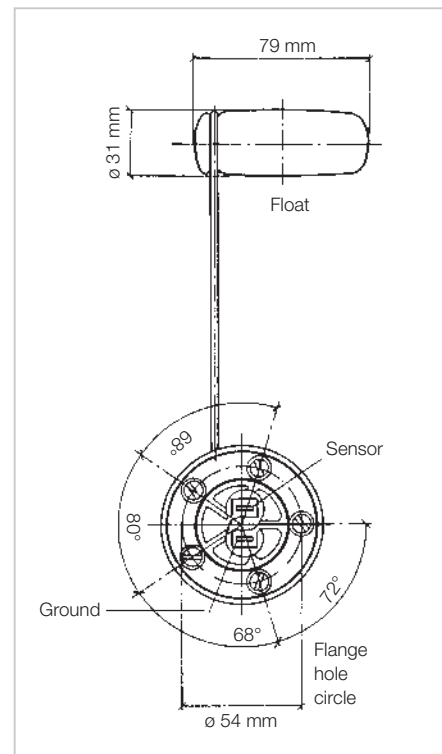
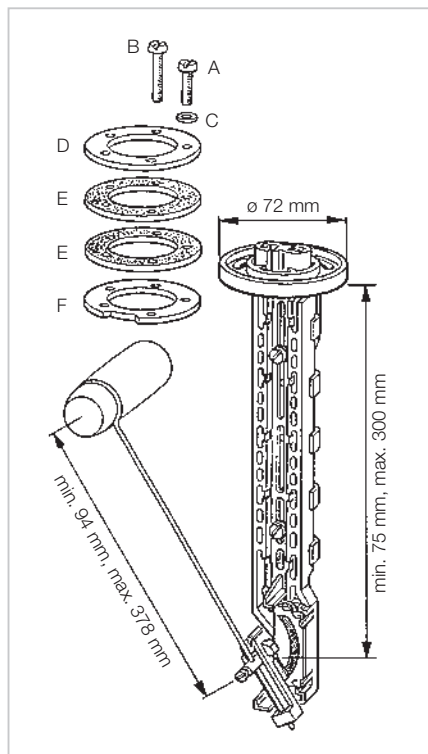
Blade terminal:

6.3 x 0.8 mm (2x)

Tankflange:

- A: Screw M5 x 15 (4x)
- B: Screw M5 x 30 (1x)
- C: Sealing washer (5x)
- D: Flange (1x)
- E: Rubber gasket (2x)
- F: Flange with slit (1x)

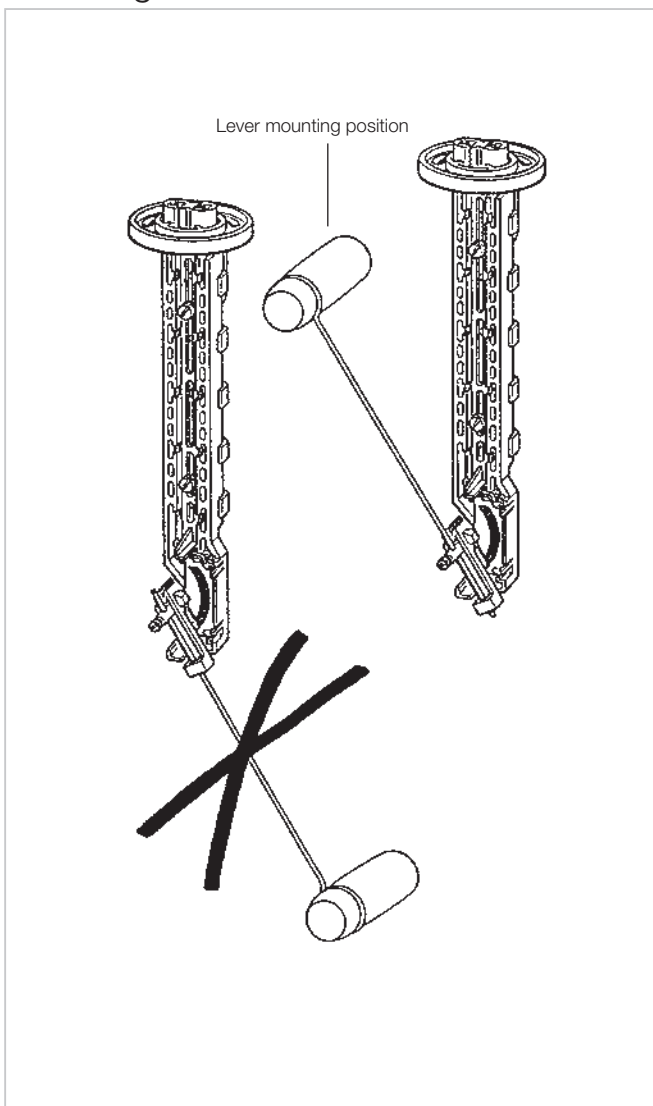
Dimensions



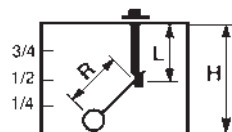


Article No.			
226-801-015-001G	150 – 605	180 ±12	3 ±1.5

Mounting



Adjustment








Adjust the length (L) of the sensor body and the radius (R) of the float lever according to the height (H) of the fuel tank.

H	L	R	H	L	R
150	75	94	380	190	238
155	77.5	97	385	192.5	241
160	80	100	390	195	244
165	82.5	103	395	197.5	247
170	85	106	400	200	250
175	87.5	109	405	202.5	253
180	90	112	410	205	256
185	92.5	115	415	207.5	259
190	95	119	420	210	263
195	97.5	122	425	212.5	266
200	100	125	430	215	269
205	102.5	128	435	217.5	271
210	105	131	440	220	274
215	107.5	134	445	222.5	277
220	110	137	450	225	281
225	112.5	140	455	227.5	284
230	115	144	460	230	288
235	117.5	147	465	232.5	291
240	120	150	470	235	294
245	122.5	153	475	237.5	297
250	125	157	480	240	300
255	127.5	160	485	242.5	303
260	130	163	490	245	306
265	132.5	166	495	247.5	310
270	135	169	500	250	313
275	137.5	172	505	252.5	316
280	140	175	510	255	319
285	142.5	178	515	257.5	322
290	145	181	520	260	325
295	147.5	184	525	262.5	328
300	150	187	530	265	331
305	152.5	191	535	267.5	335
310	155	194	540	270	338
315	157.5	197	545	272.5	341
320	160	200	550	275	344
325	162.5	203	555	277.5	347
330	165	206	560	280	350
335	167.5	209	565	282.5	353
340	170	212	570	285	356
345	172.5	216	575	287.5	360
350	175	219	580	290	363
355	177.5	222	585	292.5	366
360	180	225	590	295	369
365	182.5	228	595	297.5	372
370	185	231	600	300	375
375	187.5	234	605	302.5	378

[mm]








Without Warning Contact, Common Ground or Insulated Return* (special)

Article No.				 	EGr.**
221-824-019-022Z	274	36 ±2	296 ±15	Volvo PKW ÄT83	37/8
221-824-022-001Z	151	283 ±48	83 ±12.5	VW	42/7
221-824-022-002Z	168.5	283 ±48	36 ±4	VW/Golf K-Jet.	n/a
221-824-034-008Z	171.5 ±2.5	40 - 5	283 ±7	Volvo G15	n/a
221-824-043-002Z	260	10 ±2	250 ±4.5	BMW E36/4	n/a
221-824-053-001Z	212	283 ±4	40 ±1	VW Golf A3 Limousine	n/a
221-825-008-029C	227.5	3 ±3	180 +12 -2	DB	40/76
221-825-008-043C	284.5	3 ±3	180 +12 -2	DB	40/84
221-825-008-048C	541	10 ±3.5	180 +12 -2	DAF	38/199
221-825-009-033C	370	3 ±3	180 +12 -2	DB	38/7
221-825-009-039C	403	3 ±3	180 +12 -2	DB	38/225
221-825-009-041C	371	3 ±3	180 +12 -2	DB	38/348
221-825-009-050N	472.5	3 ±3	180 +12 -2	Henschel	38/355
221-825-009-102C	450	10 ±3.5	180 +12 -2	DAF	38/349
221-825-009-112C	495.8	3 ±3	180 +12 -2	DB	40/71
221-825-009-123C	371	3 ±3	180 +12 -2	DB	38/393
221-825-009-136C	293.5	3 ±3	180 +12 -2	Steyr Hellas	38/447
221-825-009-151C	710	3 ±3	180 +12 -2	Gann-Kässbohrer	38/516
221-825-011-020C	399	3 ±3	180 +12 -2	Faun	38/114






* Depending on connection

** Calibration group



Article No.						
						EGr.**
221-825-011-085C	329	10 ± 3.5	180 + 12 -2		KHD	n/a
221-825-011-100C	462	10 ± 3.5	180 + 12 -2		IHC	n/a
221-825-011-131C	767	3 ± 3.5	180 + 12 -2		DB/Bus	38/424
221-825-011-132C	629	3 ± 3.5	180 + 12 -2		DB/Bus	n/a
221-825-011-133C	606	3 ± 3.5	180 + 12 -2		Saurer-CH	n/a
221-825-011-135C	880	10 ± 3	180 + 12 -2		Claas	38/511
221-825-012-001C	232	10 ± 3.5	180 + 12 -2		KHD	40/170
221-825-012-003C	292	10 ± 3.5	180 + 12 -2		KHD	40/33
221-825-012-042C	444	10 ± 3.5	180 + 12 -2		Claas	n/a
221-825-013-017C	173	10 ± 3.5	180 + 12 -2		Kramer	n/a
221-825-018-036Z	458	3 ± 3	180 + 12 -2		DB	38/492
221-825-018-042C	392	3 ± 3	180 + 12 -2		DB	n/a
221-825-018-097A	634	180 + 12 -2	10 ± 3.5		Volvo	45/1
221-825-018-100Z	209.5	3 ± 1.5	180 + 12 -2		DB	40/179
221-825-018-101Z	539 ± 2.5	180 + 9 -2	3 ± 1.5		DB	283.5 +/- 2
221-825-018-121C	500	3 ± 3	180 + 12 -2		Steyr	38/492

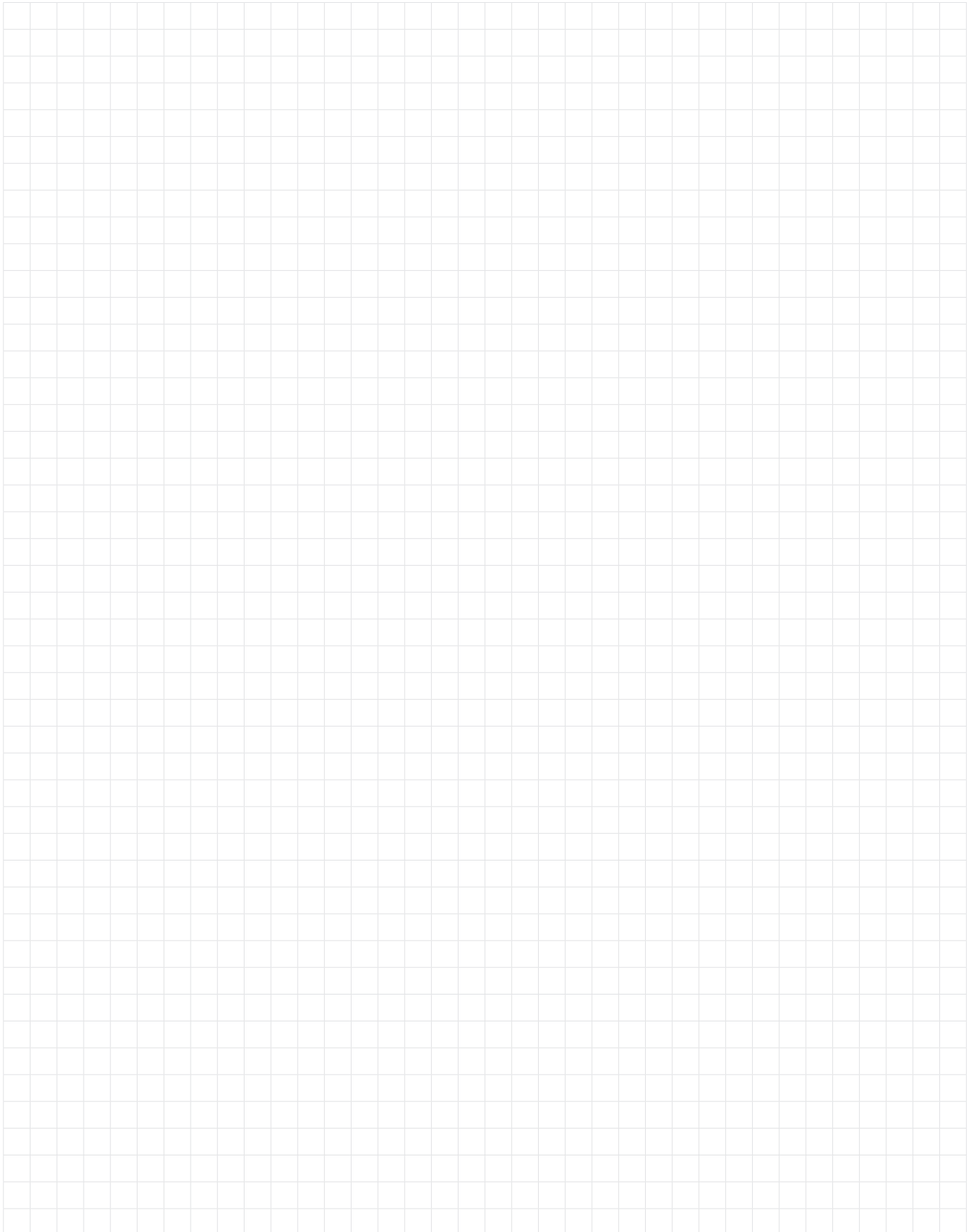


Article No.				 	EGr.**
221-825-018-187C	417.5	5 ±3	86 +8 -2	KHD/1105/1106	n/a
221-825-022-018C	341	3 ±3	180 +12 -2	DB	40/120
221-825-024-002C	401.5	10 ±3	180 +12 -2	KHD	40/143
221-825-024-006C	389.5	10 ±3	180 +12 -2	KHD	40/165
221-825-025-002C	701	10 ±3.5	180 +12 -2	n/a	40/165
221-826-002-021C	582.52	3 ±3	180 +12 -2	Kässbohrer	38/481
221-829-001-001C	480	330 ±15	8 ±4	Magirus -Deutz	n/a
221-833-002-011Z	135	283 +5 -4	40 +4 -0.5	VW, FE Golf A3 Limousine	43/8
221-833-003-006Z	129	38 ±1.5	283 ±5	Opel	n/a

* Depending on connection

** Calibration group







Tubular-Type Senders

Without Warning Contact (ø 54 mm)*	80
Without Warning Contact (ø 80 mm)*	84
With Warning Contact (ø 54 mm)*	88
Without Warning Contact (special)*	92

* Common Ground or Insulated Return



Without Warning Contact, Common Ground or Insulated Return* (ø 54 mm)

Technical Data

Rated voltage:

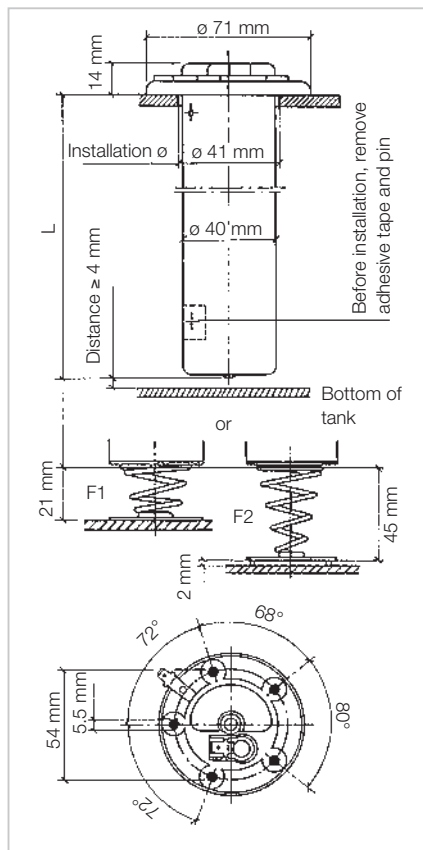
6 V to 24 V – Ground on tank housing

Operating temperature:

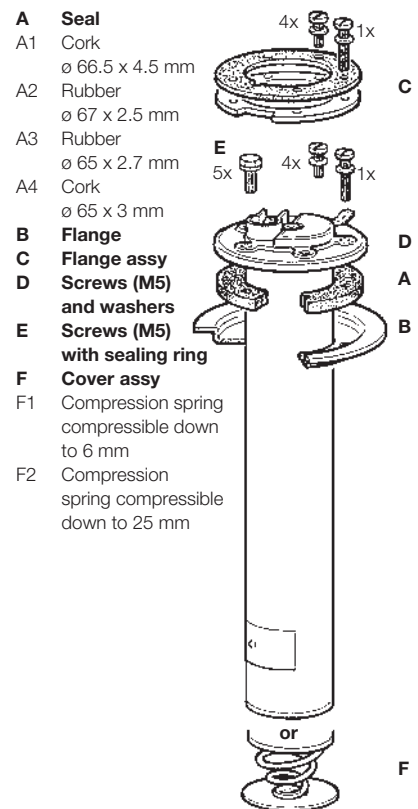
-25° C to +65° C or
-25° C to +70° C

Installation from above

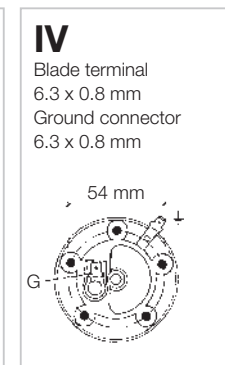
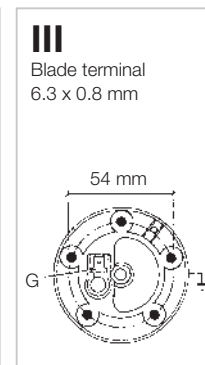
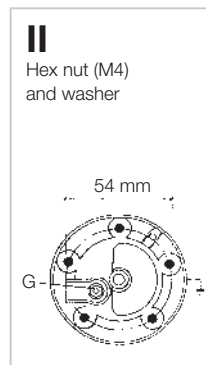
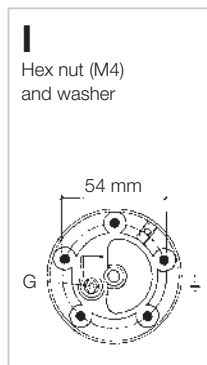
Dimensions



Special Features



Type of Connection



* Depending on connection



Article No.						
224-082-005-095R	54	321.5	1.1 ±0.4	82 ±1.8	I	A1
224-082-005-101R	54	418.5	0.8 ±0.4	74.5 ±1.6	I	A1
224-082-005-118R	54	454.5	0.8 ±0.4	81.3 ±1.8	I	A1, F1
224-082-005-132R	54	387.5	1.5 ±0.4	70.1 ±1.6	I	A1



Article No.



224-082-005-162R	54	880.5	0.4 ±0.6 -0.4	70.6 ±1.9	I	A2, F1
224-082-007-009R	54	321.5	1.1 ±0.4	82 ±1.8	IV	A3
224-082-007-014R	54	478.5	0.8 ±0.4	85.8 ±1.8	IV	A1
224-082-007-017R	54	596.5	0.5 ±0.4	74.1 ±1.6	III	A1, F1
224-082-008-008R	54	189.5	1.6 ±0.4	65.9 ±1.4	III	C
224-082-008-018R	54	166.5	2.3 ±0.4	81.8 ±1.8	III	-

* Depending on connection



Accessory Parts – Without Warning Contact, Common Ground or Insulated Return (ø 54 mm)

Article No.	Product	 S
2-250-234	Seal (Cork)	A1
2-251-243	Seal (Rubber)	A3
2-250-264	Flange Compression spring – short	B



Without Warning Contact, Common Ground or Insulated Return* (ø 80 mm)

Technical Data

Rated voltage:

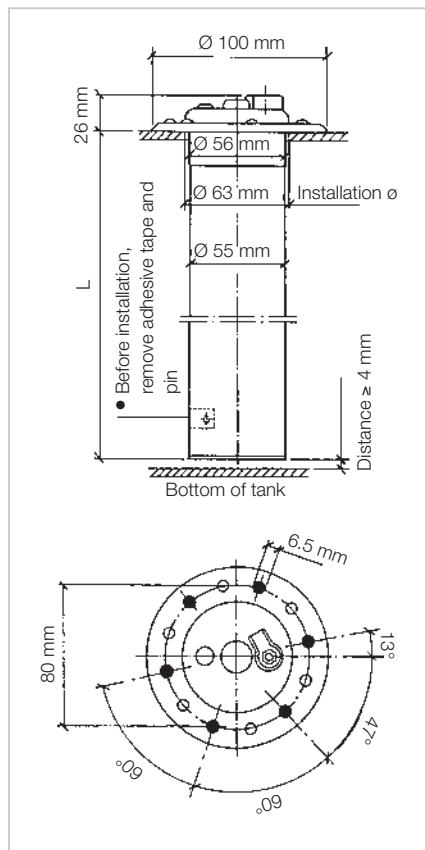
6 V to 24 V

Operating temperature:

-25° C to +70° C

Installation from above

Dimensions



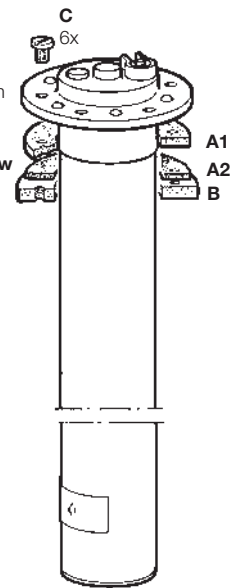
Special Features

A Seal

- A1 Cork
ø 95.5 x 5 mm
- A2 Rubber
ø 95.2 x 2.5 mm

B Flange

- C Flat head screw
M6 x 10



Type of Connection

I
Hex nut (M5)
and lock washer
Ground on tank
housing

II
Blade terminal
6.3 x 0.8 mm
Ground on tank
housing

III
Blade terminal/
Ground connector
Ground on tank
housing

IV
Hex nut (M5)
and lock washer (2x)
Insulated Return

* Depending on connection



Article No.



Article No.	mm	L mm	Ω	Ω	A	S
X10-224-009-021	80	1045 ± 2	0.5 ± 0.7	92.7 ± 2.7	I	A2
X10-224-009-029	80	741 ± 2	0.5 ± 0.7	65.0 ± 2.1	I	A2
X10-224-009-037	80	536 ± 2	0.8 ± 0.7	67.2 ± 2.1	I	-
X10-224-009-040	80	1086 ± 2	0.4 ± 0.7	64.1 ± 2.1	I	A2
X10-224-009-048	80	641 ± 2	0.8 ± 0.7	81.0 ± 2.5	n/a	-
X10-224-009-072	80	1387 ± 2	0.5 ± 0.7	82.4 ± 2.5	I	A2
X10-224-014-002	80	686 ± 2	0.8 ± 0.7	86.7 ± 2.5	I	-
X10-224-014-003	80	881 ± 2	0.7 ± 0.7	78 ± 2.4	II	-
X10-224-014-011	80	916 ± 2	0.7 ± 0.7	81.2 ± 2.5	I	A2
X10-224-014-015	80	996 ± 2	0.5 ± 0.7	59.2 ± 1.9	I	A2
X10-224-014-023	80	946 ± 2	0.7 ± 0.7	83.9 ± 2.5	II	A1
X10-224-014-030	80	380 ± 2	2.2 ± 0.7	88.5 ± 2.5	III	A2
X10-224-014-031	80	326 ± 2	1.5 ± 0.7	59.4 ± 1.9	III	A2
X10-224-014-036	80	500 ± 2	1.0 ± 0.7	63.3 ± 2.1	III	A2
X10-224-014-044	80	1250 ± 2	0.5 ± 0.7	74.2 ± 2.3	II	A2
X10-224-021-001	80	536 ± 2	1.0 ± 0.7	67.9 ± 2.1	IV	A1
X10-224-021-004	80	803 ± 2	0.7 ± 0.7	71.1 ± 2.3	IV	A1
X10-224-021-005	80	1045 ± 2	0.7 ± 0.7	92.9 ± 2.7	IV	A1
X10-224-021-006	80	846 ± 2	0.7 ± 0.7	75.0 ± 2.3	IV	A1



Accessory Parts – Without Warning Contact, Common Ground or Insulated Return (ø 80 mm)

Article No.	Product	
2-251-006	Seal (Cork)	A1
2-251-016	Seal (Rubber)	A2





With Warning Contact, Common Ground or Insulated Return* (ø 54 mm)

Technical Data

Rated voltage:

6 V to 24 V,
Ground on tank housing

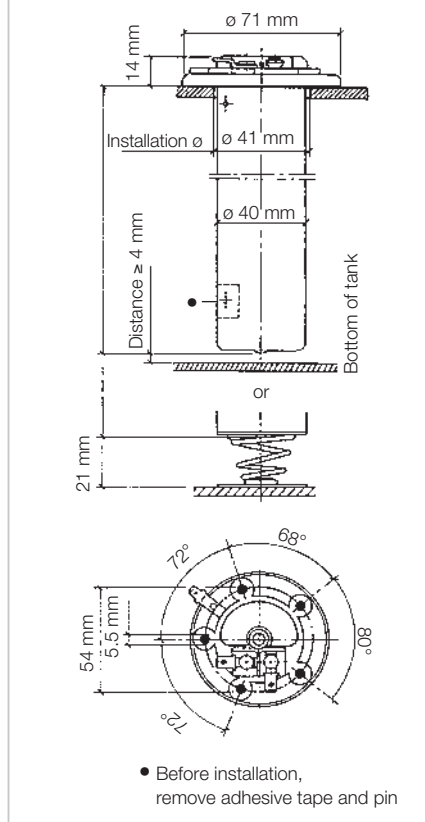
Operating temperature:

-25° C to +65° C

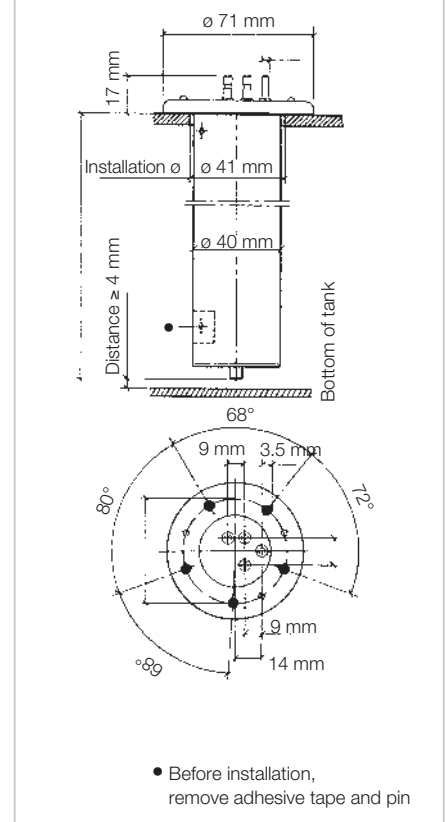
Installation from above

Dimensions

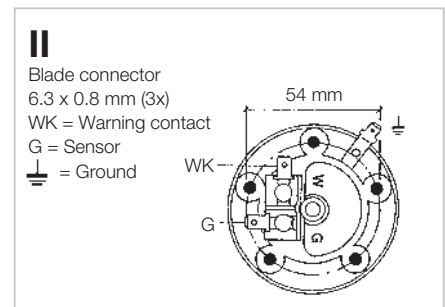
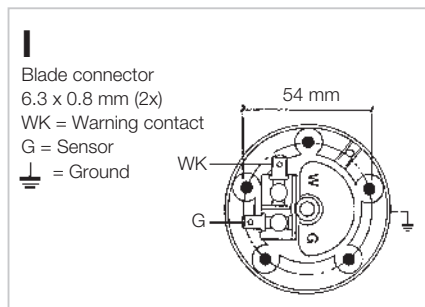
Form 1



Form 2



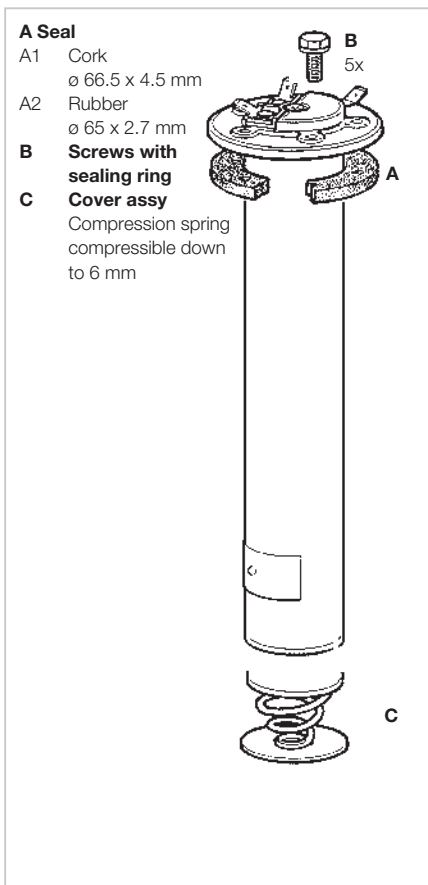
Type of Connection



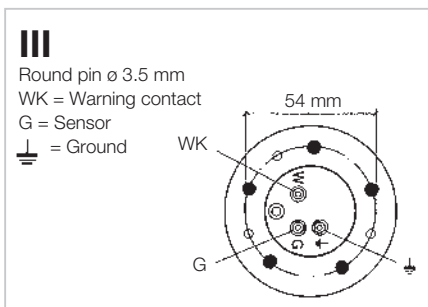
* Depending on connection



Special Features










Type of Connection





Article No.

							
224-802-030-008B	54	610	1 ±0.8	72 ±2.4	n/a	n/a	Bayonet








Accessory Parts – With Warning Contact, Common Ground or Insulated Return* (ø 54 mm)

Article No.	Product	
		
2-250-234	Seal (Cork)	A1
2-251-243	Seal (Rubber) Compression spring – short	A2

* Depending on connection



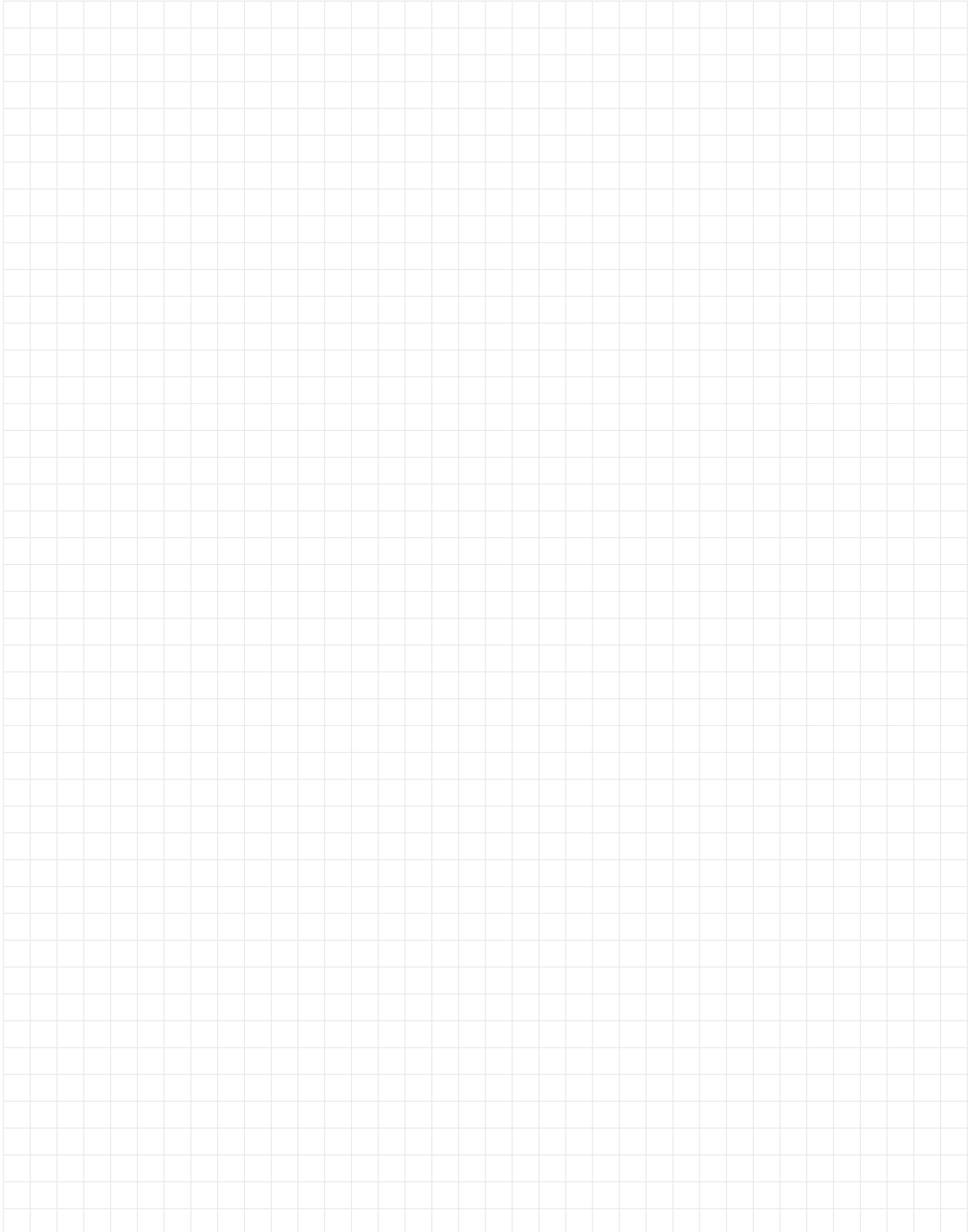
Without Warning Contact, Common Ground or Insulated Return* (special)

Article No.				 	EGr.**
224-082-019-007P	224.5	3.2 ±0.7	80.6 ±2.5	BMW/114	n/a
224-082-023-001P	206	6.9 ±0.7	70.3 ±2.3	DC	21/341
224-817-012-001R	192	4.7 ±0.7	88.2 ±2.6	BMW E21	21/324
224-817-020-001Z	317.5	2.2 ±0.7	70.3 ±2.3	Porsche 928	21/354
224-817-022-007Z	193	3.2 ±0.7	58.8 ±1.9	BMW/E30	21/494
224-817-047-002R	276	2.2 ±0.7	59.3 ±2.1	Still	21/539

* Depending on connection

** Calibration group







Cross-Reference List

<u>OE No. > Article No. (sorted by manufacturer)</u>	95
<u>OE No. > Article No. (all manufacturers)</u>	110
<u>Article No. > OE No. (sorted by manufacturer)</u>	120
<u>Article No. > OE No. (all manufacturers)</u>	134



Cross-Reference

OE No. > Article No. (sorted by manufacturer)

OE No.	Article No.	Article No. (new)	Name of Article
--------	-------------	-------------------	-----------------

AGCO / FENDT

192200230030	340-804-007-020C		RPM/SS Inductiv
385200230030	340-804-007-019C		RPM/SS Inductiv
F182.900.020.040	323-801-005-005D		TS woWC CG-IR
F250.200.061.010	224-082-005-132R		TTS 54 woWC CG-IR
F250.200.061.020	2-250-234		Accessory
H198.903.020.010	232-011-017-135D		TSw -A- CG
H312.900.020.010	323-805-039-001C		TS woWC CG-IR
H312.970.020.020	360-081-032-060C		PS woWC IR
H816.900.020.020	360-081-038-014C		PS woWC IR
H816.970.020.010	360-081-032-059C		PS woWC IR
X540.740.100.000	2-251-243		Accessory
X810.150.020.010	89-356-017		Accessory
X820.080.050	360-081-029-033C		PS woWC CG
X830.030.050	323-801-003-001D		TS woWC CG-IR
X830.030.053.000	323-801-001-006N		TS woWC CG-IR
X830.030.059	323-801-028-001C		TS (Sp) 2MS
X830.030.085	323-803-001-013D		TS wWC CG
X830.030.086.000	323-803-001-020D		TS wWC CG
X830.240.006	232-011-017-076D		TSw -A- CG
X830.240.013	232-011-017-032D		TSw -A- CG

AUDI → VW-GROUP

BMW

11 65 2 230 283	323-801-010-003K		TS woWC CG-IR
16 12 1 114 254	224-817-012-001R		TTS (Sp) woWC CG-IR
16 14 1 152 266	224-817-022-007Z		TTS (Sp) woWC CG-IR
16 14 1 180 517	221-824-043-002Z		LTS (Sp) woWC CG-IR
16 14 1 358 097	224-082-019-007P		TTS (Sp) woWC CG-IR
2 230 281	360-081-030-009C		PS wWC CG
2 230 281	360-081-030-009K		PS wWC CG
2 230 282	360-081-032-003C		PS woWC IR
62 16 1 358 097	224-082-019-007P		TTS (Sp) woWC CG-IR
62 16 1 360 870	323-803-001-022D		TS wWC CG



OE No.	Article No.	Article No. (new)	Name of Article
CLAAS			
00132300	340-804-007-019C		RPM/SS Inductiv
00716030	221-825-011-135C		LTS (Sp) woWC CG-IR
00718000	221-825-012-042C		LTS (Sp) woWC CG-IR
01333200	230-112-003-022C		PSw CG-IR
01780280	232-011-005-004D		TSw -A- CG
02339010	232-011-017-016D		TSw -A- CG
05767020	230-112-001-015C		PSw CG-IR
05850900	232-011-017-034D		TSw -A- CG
05859730	323-803-001-030D		TS wWC CG
06040150	340-811-001-003B		RPM/SS FGenerator
06575670	323-803-001-025D		TS wWC CG
06575680	323-803-004-002D		TS wWC CG
06578780	323-803-004-001D		TS wWC CG
06602270	323-801-001-006N		TS woWC CG-IR
06729960	89-356-017		Accessory
06768350	340-804-007-011C		RPM/SS Inductiv
06768350	340-804-007-011G		RPM/SS Inductiv
07147050	323-801-001-008N		TS woWC CG-IR
07148060	323-801-003-001D		TS woWC CG-IR
07209060	2-250-234		Accessory

DAF

0103405	340-804-005-002C		RPM/SS Inductiv
0104950	221-825-008-048C		LTS (Sp) woWC CG-IR
0162112	360-081-029-010C		PS woWC CG
0162112	360-081-029-010K		PS woWC CG
0162113	360-081-032-003C		PS woWC IR
0231127	360-081-029-001C		PS woWC CG
0231127	360-081-029-001K		PS woWC CG
0236776	360-081-032-002C		PS woWC IR
0243840	230-112-005-001C		PSw CG-IR
0248178	323-805-001-001K		TS woWC CG-IR
0248178	323-805-001-001N		TS woWC CG-IR
0248179	323-801-001-006N		TS woWC CG-IR
0248180	323-803-001-006D		TS wWC CG



OE No.	Article No.	Article No. (new)	Name of Article
DAF			
0267899	89-356-017		Accessory
0379943	323-801-004-002N		TS woWC CG-IR
0503302	221-825-009-102C		LTS (Sp) woWC CG-IR
0524290	360-081-029-012C		PS woWC CG
0524290	360-081-029-012K		PS woWC CG
0648634	323-803-006-002C		TS wWC CG
0652201	230-112-002-001C		PSw CG-IR
0654090	230-112-005-011C		PSw CG-IR
0672060	323-803-001-001D		TS wWC CG
0685537	325-805-003-001C		TS woWC CG-IR
0689296	232-011-017-032D		TSw -A- CG
1140043	360-081-029-026C		PS woWC CG
1140043	360-081-029-026K		PS woWC CG
1265058	230-112-005-006C		PSw CG-IR
1268667	360-081-030-017C		PS wWC CG

DEERE → JOHN DEERE

DEUTZ / KHD

01137306	360-081-030-070C		PS wWC CG
01162743	360-081-030-037C		PS wWC CG
01163720	360-081-032-008C		PS woWC IR
01163722	323-805-001-001K		TS woWC CG-IR
01163722	323-805-001-001N		TS woWC CG-IR
01169902	230-112-005-001C		PSw CG-IR
01171283	340-808-001-002C		RPM/SS Generator
01171283	340-808-001-002G		RPM/SS Generator
01173469	232-011-005-027D		TSw -A- CG
01173672	323-803-002-007D		TS wWC CG
01174555	232-011-005-030D		TSw -A- CG
01177066	323-804-004-010C		TS (Sp) Bi
01177090	323-801-028-001C		TS (Sp) 2MS
01178104	323-803-014-002D		TS wWC CG
01179026	360-081-053-003C		PS wWC CG
01179145	323-803-014-002D		TS wWC CG
01179304	323-803-002-017D		TS wWC CG
01179305	323-803-002-016D		TS wWC CG
01179918	360-081-062-003C		PS wWC CG
01180460	323-803-002-019D		TS wWC CG
01180664	323-803-014-007C		TS wWC CG
01181115KZ	360-081-062-005A		PS wWC CG
01260599	232-011-017-034D		TSw -A- CG



OE No.	Article No.	Article No. (new)	Name of Article
01262586	323-803-002-002D		TS wWC CG
02308169	221-825-012-003C		LTS (Sp) woWC CG-IR
02308185	221-825-012-001C		LTS (Sp) woWC CG-IR
02406368	360-081-030-025C		PS wWC CG
03344066	2-250-234		Accessory
03360849	232-011-005-015D		TSw -A- CG
03367212	232-011-005-004D		TSw -A- CG
04189466	360-081-062-004A		PS wWC CG
04189605	323-805-042-001C		TS woWC CG-IR
04190809	360-081-062-002A		PS wWC CG
04199522	323-805-039-001C		TS woWC CG-IR
04199523	360-081-032-060C		PS woWC IR
04342181	221-825-024-001C		LTS woWC IR
04347114	2-251-016		Accessory
04349404	2-251-243		Accessory
04352572	221-825-024-002C		LTS (Sp) woWC CG-IR
04356048	221-825-024-006C		LTS (Sp) woWC CG-IR
04384139	221-825-018-187C		LTS (Sp) woWC CG-IR
04389616	89-356-017		Accessory
06253949	323-801-001-029N		TS woWC CG-IR
06260431	89-356-017		Accessory
06262123	340-804-007-003C		RPM/SS Inductiv
09946645	360-081-030-009C		PS wWC CG
09946645	360-081-030-009K		PS wWC CG
09974211	360-081-032-011C		PS woWC IR
12153470	360-081-029-010C		PS woWC CG
12153470	360-081-029-010K		PS woWC CG
12153471	360-081-032-003C		PS woWC IR
12153671	232-011-017-034D		TSw -A- CG
12153673	323-801-001-006N		TS woWC CG-IR
12153674	323-803-001-001D		TS wWC CG
12153927	230-112-005-012C		PSw CG-IR
12153937	230-112-004-004C		PSw CG-IR
6.0568.50.9.0014	232-011-017-034D		TSw -A- CG
6.0568.50.9.0014	232-011-017-035D		TSw -A- CG
6.0568.50.9.0030	323-805-001-001K		TS woWC CG-IR
6.0568.50.9.0030	323-805-001-001N		TS woWC CG-IR
6.0568.50.9.0034	232-011-019-003D		TSw -A- CG
6.0578.20.1.0011	230-112-005-012C		PSw CG-IR



OE No.	Article No.	Article No. (new)	Name of Article
--------	-------------	-------------------	-----------------

EVOBUS

004 542 25 17	221-825-011-132C		LTS (Sp) woWC CG-IR
404 471 00 80	2-251-243		Accessory
7.314.084.000.0	360-081-063-003C		PS wWC IR
7.314.085.000.0	360-081-064-004C		PS wWC IR
8.361.000.002.0	2-250-234		Accessory
8.743.083.000.0	340-808-001-002C		RPM/SS Generator
8.743.319.015 0	2-251-016		Accessory
8.743.413.000.0	323-803-001-006D		TS wWC CG
8.743.440.000.0	221-826-002-021C		LTS (Sp) woWC CG-IR
8.743.505.000.0	323-803-001-004D		TS wWC CG
8.743.521.000.0	360-081-030-074C		PS wWC CG
8.743.590.000.0	360-081-034-004C		PS wWC CG
8.743.718.000.0	232-011-017-078D		TSw -A- CG
8.743.719.000.0	360-081-030-052C		PS wWC CG
8.743.720.000.0	323-803-001-019D		TS wWC CG
8.749.071.000.0	224-082-007-014R		TTS 54 woWC CG-IR

FAUN

-	221-825-011-020C		LTS (Sp) woWC CG-IR
---	------------------	--	---------------------

FENDT → AGCO / FENDT

FORD

79HB-10884-AA	323-801-001-022N		TS woWC CG-IR
82DB-10B921-AB	323-803-002-007D		TS wWC CG

IRISBUS

0481 6993	323-805-001-001K		TS woWC CG-IR
0481 6993	323-805-001-001N		TS woWC CG-IR
1.001.110	2-251-243		Accessory



OE No.	Article No.	Article No. (new)	Name of Article
IVECO / MAGIRUS			
0117 3470 ES 8942-15	232-011-005-028D		TSw -A- CG
0117 3672 EC 8942-14	323-803-002-007D		TS woWC CG
0126 2586 ED 8742-14	323-803-002-002D		TS woWC CG
0240 5960 KZ 0144-51	323-801-003-001D		TS woWC CG-IR
0245 5901 KZ 5051-72	221-825-011-085C		LTS (Sp) woWC CG-IR
0256 4075 KJ 5107-72	224-082-007-009R		TTS 54 woWC CG-IR
0334 4066	2-251-243		Accessory
0336 0847 EE 0144-51	340-807-001-001C		RPM/SS Generator
0336 0847 KZ 0144-51	340-807-001-001C		RPM/SS Generator
0337 0879 EE 0154-51	360-081-030-008C		PS woWC CG
0446 1891	323-801-001-040N		TS woWC CG-IR
0446 1891 ED 5049-64	323-801-001-040N		TS woWC CG-IR
0446 1892 ED 5049-64	360-081-029-038C		PS woWC CG
0450 2294 EE 5045-80	230-112-005-004C		PSw CG-IR
0481 6993	323-805-001-001N		TS woWC CG-IR
0486 0228	221-826-014-012Z		LTS woWC IR
0819 7899	89-356-017		Accessory
4182 2164	232-011-017-004D		TSw -A- CG
4191 4925	323-801-013-001D		TS woWC CG-IR
4191 4925	323-801-017-001K		TS woWC CG-IR
4191 4925	323-801-017-001N		TS woWC CG-IR

IVECO / MAGIRUS

4201 3805	221-829-001-001C		LTS (Sp) woWC CG-IR
4207 5385	221-826-014-006Z		LTS woWC IR
4208 0907	323-801-028-001C		TS (Sp) 2MS
4219 0221 EE 5045-80	230-112-001-004C		PSw CG-IR
4252 2650	323-803-002-007D		TS woWC CG
787400	360-081-030-112C		PS woWC CG
931870	340-804-005-002C		RPM/SS Inductiv
XXX OLK 440	323-801-028-001C		TS (Sp) 2MS

JOHN DEERE

AL19509	323-801-001-006N		TS woWC CG-IR
AL81358	232-011-017-141D		TSw -A- CG
AZ12546	340-808-001-002C		RPM/SS Generator
AZ12546	340-808-001-002G		RPM/SS Generator
AZ35440	323-803-001-032D		TS woWC CG
AZ48097	232-011-017-139D		TSw -A- CG
L33601	89-356-017		Accessory
T10521147	221-825-024-001C		LTS woWC IR



OE No.	Article No.	Article No. (new)	Name of Article
KÄSSBOHRER			
-	221-825-009-151C		LTS (Sp) woWC CG-IR

KHD → DEUTZ / KHD

KRAMER

-	221-825-013-017C		LTS (Sp) woWC CG-IR
---	------------------	--	---------------------

LAND ROVER

ESR1223	221-824-055-001Z		LTS woWC IR
---------	------------------	--	-------------

MAGIRUS → IVECO/MAGIRUS

MAN

-	360-081-030-001K		PS wWC CG
357 00 71 0011	360-081-053-003C		PS wWC CG
380B 910701	2-250-234		Accessory
50.27421-0017	323-803-001-004D		TS wWC CG
50.27421-0043	230-112-005-001C		PSw CG-IR
50.27421-0044	230-112-005-011C		PSw CG-IR
50.27421-0049	360-081-038-003C		PS woWC IR
50.27421-0051	360-081-030-017C		PS wWC CG
50.27421-0082	360-081-038-002C		PS woWC IR
50.61344-1000	323-805-001-001K		TS woWC CG-IR
50.61344-1000	323-805-001-001N		TS woWC CG-IR
50.76034-0007	360-081-032-003C		PS woWC IR
51.27420-0008	323-803-004-001D		TS wWC CG
51.27420-0015	323-803-004-003D		TS wWC CG
51.27420-0030	323-803-002-002D		TS wWC CG
51.27420-0073	323-805-039-001C		TS woWC CG-IR
51.27421-0094	360-081-038-001C		PS woWC IR
51.27421-0099	360-081-032-059C		PS woWC IR
614 09 0067	323-803-001-006D		TS wWC CG
614 09 0068	360-081-030-008C		PS wWC CG
614 09 0105	360-081-029-085C		PS woWC CG



OE No.	Article No.	Article No. (new)	Name of Article
MAN			
81.12901-0004	2-251-243		Accessory
81.12901-0026	2-251-016		Accessory
81.25909-0015	340-804-005-001C		RPM/SS Inductiv
81.27120-0050	340-804-006-007C		RPM/SS Inductiv
81.27121-0002	340-807-001-001C		RPM/SS Generator
81.27121-0003	340-811-001-003B		RPM/SS FGenerator
81.27420-0013	232-011-017-010D		TSw -A- CG
81.27420-0023	232-011-005-004D		TSw -A- CG
81.27420-0049	323-803-004-003D		TS wWC CG
81.27420-0080	232-011-017-038D		TSw -A- CG
81.27421-0004	323-801-001-022N		TS woWC CG-IR
81.27421-0005	323-803-001-016D		TS wWC CG
81.27421-0018	323-801-004-002N		TS woWC CG-IR
81.27421-0019	323-803-006-002C		TS wWC CG
81.27421-0020	X10-224-009-048		TTS 80 woWC CG-IR
81.27421-0085	224-802-030-008B		TTS 54 wWC CG-IR
81.27421-0091	360-081-030-053C		PS wWC CG
81.27421-0097	360-081-063-001C		PS wWC IR
81.27421-0098	360-081-064-001C		PS wWC IR
81.27421-0109	360-081-064-003C		PS wWC CG
81.27422-0001	224-082-007-009R		TTS 54 woWC CG-IR
81.27901-0012	89-356-017		Accessory
82.27421-0019	360-081-032-011C		PS woWC IR
88.25909-6002	340-804-003-001		RPM/SS Inductiv
88.25909-6002	340-804-005-007C		RPM/SS Inductiv
88.27421-6008	360-081-030-070C		PS wWC CG
88.27421-6010	360-081-032-008C		PS woWC IR
90.81616-1788	360-081-030-031C		PS wWC CG
990 00 71 0055	323-801-009-003D		TS woWC CG-IR
991 12 55 0126	221-825-018-121C		LTS (Sp) woWC CG-IR
991 12 71 0002	340-807-001-001C		RPM/SS Generator

MERCEDES-BENZ

-	221-825-009-041C		LTS (Sp) woWC CG-IR
-	221-825-018-042C		LTS (Sp) woWC CG-IR
-	221-825-022-018C		LTS (Sp) woWC CG-IR
000 000 58 33	323-803-004-003D		TS wWC CG
000 153 32 32	230-112-003-022C		PSw CG-IR
000 153 48 32	230-112-007-005C		PSw CG-IR
000 153 95 20	340-804-077-006Z		RPM/SS Inductive
000 542 14 25	362-081-003-001C		PS woWC CG
000 542 32 17	230-112-005-001C		PSw CG-IR
000 542 63 17	221-825-009-033C		LTS (Sp) woWC CG-IR



OE No.	Article No.	Article No. (new)	Name of Article
000 542 81 17	221-825-009-039C		LTS (Sp) woWC CG-IR
000 997 51 49	89-356-017		Accessory
001 153 02 20	340-804-077-010Z		RPM/SS Inductive
001 153 04 20	340-804-077-011Z		RPM/SS Inductive
001 153 78 28	340-804-005-001C		RPM/SS Inductiv
001 542 19 17	221-825-009-123C		LTS (Sp) woWC CG-IR
001 542 21 17	360-081-029-001C		PS woWC CG
001 542 21 17	360-081-029-001K		PS woWC CG
001 542 23 17	323-801-001-054D		TS woWC CG-IR
001 542 26 17	340-807-001-001C		RPM/SS Generator
001 542 33 17	230-113-001-004C		PSw CG-IR
001 542 56 17	360-081-034-002C		PS wWC CG
001 542 75 17	221-825-008-029C		LTS (Sp) woWC CG-IR
001 542 82 17	360-081-029-025C		PS woWC CG
001 542 82 17	360-081-029-025K		PS woWC CG
001 542 84 17	323-803-001-001D		TS wWC CG
001 542 93 17	221-825-009-112C		LTS (Sp) woWC CG-IR
001 542 97 17	221-825-008-043C		LTS (Sp) woWC CG-IR
002 542 17 17	360-081-034-004C		PS wWC CG
002 542 26 17	340-804-005-002C		RPM/SS Inductiv
002 542 67 17	221-825-009-050N		LTS (Sp) woWC CG-IR
002 542 73 17	323-803-004-001D		TS wWC CG
002 542 75 17	323-805-001-001K		TS woWC CG-IR
002 542 75 17	323-805-001-001N		TS woWC CG-IR
003 542 55 17	360-081-030-036C		PS wWC CG
003 542 55 17	360-081-030-036K		PS wWC CG
004 542 25 17	221-825-011-132C		LTS (Sp) woWC CG-IR
004 542 43 17	360-081-029-059C		PS woWC CG
004 542 56 17	323-803-004-002D		TS wWC CG
004 542 89 17	360-081-029-065C		PS woWC CG
004 545 01 24	232-011-020-006E		TSw -A- CG
004 545 60 24	232-011-017-087D		TSw -A- CG
005 542 10 17	323-801-020-002D		TS woWC CG-IR
005 542 18 17	360-081-029-087C		PS woWC CG
005 542 38 17	221-825-018-036Z		LTS (Sp) woWC CG-IR
005 542 39 17	221-825-018-101Z		LTS (Sp) woWC CG-IR
005 542 41 17	221-825-018-046Z		LTS woWC IR
005 542 42 17	221-825-018-056Z		LTS woWC IR
005 542 69 17	221-825-011-131C		LTS (Sp) woWC CG-IR
005 545 76 24	232-011-020-022E		TSw -A- CG
006 542 32 17	360-081-029-085C		PS woWC CG
006 542 69 17	340-804-005-013A		RPM/SS Inductiv
006 542 71 17	340-804-005-015C		RPM/SS Inductiv
006 542 74 17	221-825-011-137C		LTS woWC IR
006 542 88 17	340-804-005-018C		RPM/SS Inductiv
006 542 94 17	360-081-052-003C		PS woWC CG
006 545 56 24	232-011-017-034D		TSw -A- CG



OE No.	Article No.	Article No. (new)	Name of Article
MERCEDES-BENZ			
006 545 87 24	232-011-017-037D		Tsw -A- CG
007 542 09 17	323-803-004-007D		TS woWC CG
008 542 10 17	323-803-001-013D		TS woWC CG
008 542 18 17	340-804-005-020C		RPM/SS Inductiv
008 542 80 17	221-825-018-100Z		LTS (Sp) woWC CG-IR
010 542 85 17	340-216-010-004C		RPM/SS AOscillator
011 542 60 17	221-824-054-003		LTS woWC IR
011 542 60 17	221-824-054-049C		LTS woWC IR
011 542 62 17	221-824-054-005		LTS woWC IR
011 542 62 17	221-824-054-050C		LTS woWC IR
011 542 64 17	221-824-054-007		LTS woWC IR
011 542 64 17	221-824-054-051C		LTS woWC IR
011 542 66 17	221-824-054-009		LTS woWC IR
011 542 66 17	221-824-054-052C		LTS woWC IR
011 542 68 17	221-824-054-053C		LTS woWC IR
011 542 75 17	221-824-054-026		LTS woWC IR
011 542 75 17	221-824-054-054C		LTS woWC IR
012 542 05 17	360-081-032-060C		PS woWC IR
012 542 49 17	340-216-008-004Z		RPM/SS AOscillator
012 542 79 17	221-824-054-028		LTS woWC IR
012 542 79 17	221-824-054-056C		LTS woWC IR
012 542 95 17	221-824-054-027		LTS woWC IR
012 542 95 17	221-824-054-055C		LTS woWC IR
013 542 62 17	340-216-008-010Z		RPM/SS AOscillator
026 542 01 17	360-081-032-003C		PS woWC IR
026 542 02 17	360-081-029-010C		PS woWC CG
026 542 02 17	360-081-029-010K		PS woWC CG
202 470 39 41	221-839-002-004Z		LTS woWC IR
208 470 10 41	221-839-001-014Z		LTS woWC IR
404 471 00 80	2-251-243		Accessory
4205 6669	340-804-005-001C		RPM/SS Inductiv
601 542 00 17	224-082-023-001P		TTS (Sp) woWC CG-IR
B8 5200 0654395	340-808-001-002C		RPM/SS Generator
B8 5200 0654395	340-808-001-002G		RPM/SS Generator

MOTOMETER

610 003 1005	232-011-017-128D		Tsw -A- CG
610 003 1030	232-011-017-129D		Tsw -A- CG



OE No.	Article No.	Article No. (new)	Name of Article
--------	-------------	-------------------	-----------------

OPEL

1252558	360-081-030-071C		PS wWC CG
1254516	221-833-003-006Z		LTS (Sp) woWC CG-IR
90040918	360-081-030-071C		PS wWC CG
90504138	221-833-003-006Z		LTS (Sp) woWC CG-IR
90512092	221-833-003-006Z		LTS (Sp) woWC CG-IR
96014422	340-804-032-001Z		RPM/SS Inductiv
PRT 019726 010	340-804-007-001C		RPM/SS Inductiv
V28620330	323-803-001-004D		TS wWC CG

PORSCHE

914 201 891 00	2-250-234		Accessory
928 606 203 01	360-081-030-157C		PS wWC CG
928 641 030 01	224-817-020-001Z		TTS (Sp) woWC CG-IR
944 606 201 00	323-801-001-006N		TS woWC CG-IR

RENAULT

5000295954	89-356-017		Accessory
5001834540	2-251-243		Accessory

SAURER - CH

-	221-825-011-133C		LTS (Sp) woWC CG-IR
---	------------------	--	---------------------

SCANIA

149653	360-081-032-001C		PS woWC IR
154619	360-081-032-003C		PS woWC IR
195754	323-805-001-001K		TS woWC CG-IR
195754	323-805-001-001N		TS woWC CG-IR
210603	323-805-003-001N		TS woWC CG-IR
242162	323-801-001-006N		TS woWC CG-IR
250519	323-803-001-006D		TS wWC CG
253527	360-081-029-038C		PS woWC CG
264816	340-804-005-007C		RPM/SS Inductiv
275750	360-081-030-063C		PS wWC CG
285905	360-081-030-075C		PS wWC CG
340025	340-804-005-002C		RPM/SS Inductiv



OE No.	Article No.	Article No. (new)	Name of Article
SCANIA			
340492	221-825-023-009C		LTS woWC IR
345867	360-081-039-007C		PS wWC IR
348875	323-803-002-010C		TS wWC CG
373811	360-081-061-003C		PS wWC CG
374338	360-081-061-002C		PS wWC CG
397946	360-081-061-006C		PS wWC CG
642572	340-804-007-001C		RPM/SS Inductiv
670093	232-011-017-032D		TSw -A- CG

SEAT → VW-GROUP

SKODA → VW-GROUP

STEYR

-	221-825-009-136C		LTS (Sp) woWC CG-IR
17111670231	2-250-234		Accessory
2178744/0	360-081-029-012C		PS woWC CG
2178744/0	360-081-029-012K		PS woWC CG
692 00 71 0001	360-081-030-107C		PS wWC CG
7111670231	2-251-243		Accessory
7131930051	360-081-030-017C		PS wWC CG

STILL

525203	224-817-047-002R		TTS (Sp) woWC CG-IR
--------	------------------	--	---------------------

VOITH

-	360-081-029-086		PS woWC CG
-	360-081-029-087C		PS woWC CG



OE No.	Article No.	Article No. (new)	Name of Article
-	221-825-018-097A		LTS (Sp) woWC CG-IR
-	360-081-051-012C		PS woWC IR
-	360-081-051-013C		PS woWC IR
11039149	360-081-037-017C		PS woWC CG
11039662	340-804-005-015C		RPM/SS Inductiv
1136985	323-803-006-002C		TS wWC CG
1323797	360-081-030-086C		PS wWC CG
1324624	323-801-012-001D		TS woWC CG-IR
1367253	221-824-019-019		LTS (Sp) woWC CG-IR
1367253	221-824-019-022Z		LTS (Sp) woWC CG-IR
14211931	2-251-016		Accessory
1507899	340-807-001-001C		RPM/SS Generator
1578070	221-825-018-019Z		LTS woWC IR
283591	360-081-029-012C		PS woWC CG
283591	360-081-029-012K		PS woWC CG
3458882	221-824-034-008Z		LTS (Sp) woWC CG-IR
354671	340-804-007-004C		RPM/SS Inductiv
366906	360-081-030-052C		PS wWC CG
367882	232-011-017-004D		TSw -A- CG
458884	221-824-034-008Z		LTS (Sp) woWC CG-IR
4742576	X10-224-014-023		TTS 80 woWC CG-IR
4780583	360-081-029-041C		PS woWC CG
4780747	360-081-029-042C		PS woWC CG
4780941	340-804-005-002C		RPM/SS Inductiv
4786127	360-081-037-007C		PS woWC CG
4787245	224-082-014-033C		TTS 80 woWC CG-IR
4880804	340-804-005-007C		RPM/SS Inductiv
4960070	323-801-004-007D		TS woWC CG-IR
6228489	360-081-030-078C		PS wWC CG
6229967	323-801-004-006D		TS woWC CG-IR
6229969	323-801-001-026K		TS woWC CG-IR
6229969	323-801-001-026N		TS woWC CG-IR
6233384	340-808-001-002C		RPM/SS Generator
6233384	340-808-001-002G		RPM/SS Generator
6238400	360-081-037-010C		PS woWC CG
761404	224-082-009-057C		TTS 80 woWC CG-IR
8150500	340-216-007-001A		RPM/SS AOscillator
8150500	340-216-010-003C		RPM/SS AOscillator
866 839	360-081-054-002Z		PS woWC IR



OE No.	Article No.	Article No. (new)	Name of Article
VW-GROUP			
047 919 501 A	323-801-017-001K		TS woWC CG-IR
047 919 501 A	323-801-017-001N		TS woWC CG-IR
047 919 501 A	323-801-017-002		TS woWC CG-IR
047 919 501 A	323-801-017-002		TS woWC CG-IR
113 919 049 D	221-824-001-001C		LTS (Sp) woWC CG-IR
122 115 671	232-011-017-075		TSw -A- CG
122 115 671	232-011-017-103D		TSw -A- CG
171 919 051 L	221-824-022-002Z		LTS (Sp) woWC CG-IR
1H0 919 051 K	221-824-053-001Z		LTS (Sp) woWC CG-IR
1H0 919 670	221-824-053-001Z		LTS (Sp) woWC CG-IR
1H0 919 673 C	221-833-002-011Z		LTS (Sp) woWC CG-IR
1H0 919 673 F	221-833-002-011Z		LTS (Sp) woWC CG-IR
1H0 919 673 K	221-833-002-011Z		LTS (Sp) woWC CG-IR
251 919 051 E	221-824-022-001Z		LTS (Sp) woWC CG-IR
431 919 521 A	323-801-012-002D		TS woWC CG-IR
431 919 521 A	323-801-012-009		TS woWC CG-IR
431 919 521 A	323-801-012-009		TS woWC CG-IR
T11 919 081	360-081-030-009C		PS wWC CG
T11 919 081	360-081-030-009K		PS wWC CG

ZF

0501 203 072	323-803-006-002C		TS wWC CG
0501 205 316	323-801-004-002N		TS woWC CG-IR
0501 309 190	340-804-005-015C		RPM/SS Inductiv
0501 309 245	340-804-005-013A		RPM/SS Inductiv
0501 309 561	340-804-005-018C		RPM/SS Inductiv
0501 309 568	323-803-001-008D		TS wWC CG
0501 310 002	323-803-001-022D		TS wWC CG
0501 310 016	X10-232-001-001		TSw -B- IR
0501 310 091	340-216-010-004C		RPM/SS AOscillator
0501 311 517	340-804-005-020C		RPM/SS Inductiv
0501 313 475	323-803-002-002D		TS wWC CG
0501 313 968	340-804-005-028C		RPM/SS Inductiv
0744 105 020	232-011-017-032D		TSw -A- CG
090126512	340-804-006-007C		RPM/SS Inductiv
1557007100261	340-804-007-019C		RPM/SS Inductiv
6041 315 007	340-804-003-001		RPM/SS Inductiv
6041 315 007	340-804-005-007C		RPM/SS Inductiv



Cross-Reference OE No. > Article No. (all manufacturers)

OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
000 000 58 33	MERCEDES-BENZ	323-803-004-003D		TS wWC CG
000 153 32 32	MERCEDES-BENZ	230-112-003-022C		PSw CG-IR
000 153 48 32	MERCEDES-BENZ	230-112-007-005C		PSw CG-IR
000 153 95 20	MERCEDES-BENZ	340-804-077-006Z		RPM/SS Inductiv
000 542 14 25	MERCEDES-BENZ	362-081-003-001C		PS woWC CG
000 542 32 17	MERCEDES-BENZ	230-112-005-001C		PSw CG-IR
000 542 63 17	MERCEDES-BENZ	221-825-009-033C		LTS (Sp) woWC CG-IR
000 542 81 17	MERCEDES-BENZ	221-825-009-039C		LTS (Sp) woWC CG-IR
000 997 51 49	MERCEDES-BENZ	89-356-017		Accessory
001 153 02 20	MERCEDES-BENZ	340-804-077-010Z		RPM/SS Inductiv
001 153 04 20	MERCEDES-BENZ	340-804-077-011Z		RPM/SS Inductiv
001 153 78 28	MERCEDES-BENZ	340-804-005-001C		RPM/SS Inductiv
00132300	CLAAS	340-804-007-019C		RPM/SS Inductiv
001 542 19 17	MERCEDES-BENZ	221-825-009-123C		LTS (Sp) woWC CG-IR
001 542 21 17	MERCEDES-BENZ	360-081-029-001C		PS woWC CG
001 542 21 17	MERCEDES-BENZ	360-081-029-001K		PS woWC CG
001 542 23 17	MERCEDES-BENZ	323-801-001-054D		TS woWC CG-IR
001 542 26 17	MERCEDES-BENZ	340-807-001-001C		RPM/SS Generator
001 542 33 17	MERCEDES-BENZ	230-113-001-004C		PSw CG-IR
001 542 56 17	MERCEDES-BENZ	360-081-034-002C		PS wWC CG
001 542 75 17	MERCEDES-BENZ	221-825-008-029C		LTS (Sp) woWC CG-IR
001 542 82 17	MERCEDES-BENZ	360-081-029-025C		PS woWC CG
001 542 82 17	MERCEDES-BENZ	360-081-029-025K		PS woWC CG
001 542 84 17	MERCEDES-BENZ	323-803-001-001D		TS wWC CG
001 542 93 17	MERCEDES-BENZ	221-825-009-112C		LTS (Sp) woWC CG-IR
001 542 97 17	MERCEDES-BENZ	221-825-008-043C		LTS (Sp) woWC CG-IR
002 542 17 17	MERCEDES-BENZ	360-081-034-004C		PS wWC CG
002 542 26 17	MERCEDES-BENZ	340-804-005-002C		RPM/SS Inductiv
002 542 67 17	MERCEDES-BENZ	221-825-009-050N		LTS (Sp) woWC CG-IR
002 542 73 17	MERCEDES-BENZ	323-803-004-001D		TS wWC CG
002 542 75 17	MERCEDES-BENZ	323-805-001-001K		TS woWC CG-IR
002 542 75 17	MERCEDES-BENZ	323-805-001-001N		TS woWC CG-IR
003 542 55 17	MERCEDES-BENZ	360-081-030-036K		PS wWC CG
003 542 55 17	MERCEDES-BENZ	360-081-030-036C		PS wWC CG
004 542 25 17	EVOBUS	221-825-011-132C		LTS (Sp) woWC CG-IR
004 542 25 17	MERCEDES-BENZ	221-825-011-132C		LTS (Sp) woWC CG-IR
004 542 43 17	MERCEDES-BENZ	360-081-029-059C		PS woWC CG
004 542 56 17	MERCEDES-BENZ	323-803-004-002D		TS wWC CG
004 542 89 17	MERCEDES-BENZ	360-081-029-065C		PS woWC CG
004 545 01 24	MERCEDES-BENZ	232-011-020-006E		TSw -A- CG
004 545 60 24	MERCEDES-BENZ	232-011-017-087D		TSw -A- CG
005 542 10 17	MERCEDES-BENZ	323-801-020-002D		TS woWC CG-IR
005 542 18 17	MERCEDES-BENZ	360-081-029-087C		PS woWC CG



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
005 542 38 17	MERCEDES-BENZ	221-825-018-036Z		LTS (Sp) woWC CG-IR
005 542 39 17	MERCEDES-BENZ	221-825-018-101Z		LTS (Sp) woWC CG-IR
005 542 41 17	MERCEDES-BENZ	221-825-018-046Z		LTS woWC IR
005 542 42 17	MERCEDES-BENZ	221-825-018-056Z		LTS woWC IR
005 542 69 17	MERCEDES-BENZ	221-825-011-131C		LTS (Sp) woWC CG-IR
005 545 76 24	MERCEDES-BENZ	232-011-020-022E		TSw -A- CG
006 542 32 17	MERCEDES-BENZ	360-081-029-085C		PS woWC CG
006 542 69 17	MERCEDES-BENZ	340-804-005-013A		RPM/SS Inductiv
006 542 71 17	MERCEDES-BENZ	340-804-005-015C		RPM/SS Inductiv
006 542 74 17	MERCEDES-BENZ	221-825-011-137C		LTS woWC IR
006 542 88 17	MERCEDES-BENZ	340-804-005-018C		RPM/SS Inductiv
006 542 94 17	MERCEDES-BENZ	360-081-052-003C		PS woWC CG
006 545 56 24	MERCEDES-BENZ	232-011-017-034D		TSw -A- CG
006 545 87 24	MERCEDES-BENZ	232-011-017-037D		TSw -A- CG
00716030	CLAAS	221-825-011-135C		LTS (Sp) woWC CG-IR
00718000	CLAAS	221-825-012-042C		LTS (Sp) woWC CG-IR
007 542 09 17	MERCEDES-BENZ	323-803-004-007D		TS wWC CG
008 542 10 17	MERCEDES-BENZ	323-803-001-013D		TS wWC CG
008 542 18 17	MERCEDES-BENZ	340-804-005-020C		RPM/SS Inductiv
008 542 80 17	MERCEDES-BENZ	221-825-018-100Z		LTS (Sp) woWC CG-IR
0103405	DAF	340-804-005-002C		RPM/SS Inductiv
0104950	DAF	221-825-008-048C		LTS (Sp) woWC CG-IR
010 542 85 17	MERCEDES-BENZ	340-216-010-004C		RPM/SS AOscillator
01137306	DEUTZ/KHD	360-081-030-070C		PS wWC CG
011 542 60 17	MERCEDES-BENZ	221-824-054-003	221-824-054-049C	LTS woWC IR
011 542 60 17	MERCEDES-BENZ	221-824-054-049C		LTS woWC IR
011 542 62 17	MERCEDES-BENZ	221-824-054-005	221-824-054-050C	LTS woWC IR
011 542 62 17	MERCEDES-BENZ	221-824-054-050C		LTS woWC IR
011 542 64 17	MERCEDES-BENZ	221-824-054-007	221-824-054-051C	LTS woWC IR
011 542 64 17	MERCEDES-BENZ	221-824-054-051C		LTS woWC IR
011 542 66 17	MERCEDES-BENZ	221-824-054-009	221-824-054-052C	LTS woWC IR
011 542 66 17	MERCEDES-BENZ	221-824-054-052C		LTS woWC IR
011 542 68 17	MERCEDES-BENZ	221-824-054-053C		LTS woWC IR
011 542 75 17	MERCEDES-BENZ	221-824-054-026	221-824-054-054C	LTS woWC IR
011 542 75 17	MERCEDES-BENZ	221-824-054-054C		LTS woWC IR
01162743	DEUTZ/KHD	360-081-030-037C		PS wWC CG
01163720	DEUTZ/KHD	360-081-032-008C		PS woWC IR
01163722	DEUTZ/KHD	323-805-001-001N		TS woWC CG-IR
01169902	DEUTZ/KHD	230-112-005-001C		PSw CG-IR
01171283	DEUTZ/KHD	340-808-001-002C		RPM/SS Generator
01171283	DEUTZ/KHD	340-808-001-002G		RPM/SS Generator
01173469	DEUTZ/KHD	232-011-005-027D		TSw -A- CG
0117 3470 ES 8942-15	IVECO/MAGIRUS	232-011-005-028D		TSw -A- CG



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
01173672	DEUTZ/KHD	323-803-002-007D		TS wWC CG
0117 3672 EC 8942-14	IVECO/MAGIRUS	323-803-002-007D		TS wWC CG
01174555	DEUTZ/KHD	232-011-005-030D		TSw -A- CG
01177066	DEUTZ/KHD	323-804-004-010C		TS (Sp) Bi
01177090	DEUTZ/KHD	323-801-028-001C		TS (Sp) 2MS
01178104	DEUTZ/KHD	323-803-014-002D		TS wWC CG
01179026	DEUTZ/KHD	360-081-053-003C		PS wWC CG
01179145	DEUTZ/KHD	323-803-014-002D		TS wWC CG
01179304	DEUTZ/KHD	323-803-002-017D		TS wWC CG
01179305	DEUTZ/KHD	323-803-002-016D		TS wWC CG
01179918	DEUTZ/KHD	360-081-062-003C		PS wWC CG
01180460	DEUTZ/KHD	323-803-002-019D		TS wWC CG
01180664	DEUTZ/KHD	323-803-014-007C		TS wWC CG
01181115KZ	DEUTZ/KHD	360-081-062-005A		PS wWC CG
012 542 05 17	MERCEDES-BENZ	360-081-032-060C		PS woWC IR
012 542 49 17	MERCEDES-BENZ	340-216-008-004Z		RPM/SS AOscillator
012 542 79 17	MERCEDES-BENZ	221-824-054-028	221-824-054-056C	LTS woWC IR
012 542 79 17	MERCEDES-BENZ	221-824-054-056C		LTS woWC IR
012 542 95 17	MERCEDES-BENZ	221-824-054-027	221-824-054-055C	LTS woWC IR
012 542 95 17	MERCEDES-BENZ	221-824-054-055C		LTS woWC IR
01260599	DEUTZ/KHD	232-011-017-034D		TSw -A- CG
01262586	DEUTZ/KHD	323-803-002-002D		TS wWC CG
0126 2586 ED 8742-14	IVECO/MAGIRUS	323-803-002-002D		TS wWC CG
01333200	CLAAS	230-112-003-022C		PSw CG-IR
013 542 62 17	MERCEDES-BENZ	340-216-008-010Z		RPM/SS AOscillator
0162112	DAF	360-081-029-010K		PS woWC CG
0162112	DAF	360-081-029-010C		PS woWC CG
0162113	DAF	360-081-032-003C		PS woWC IR
01780280	CLAAS	232-011-005-004D		TSw -A- CG
02308169	DEUTZ/KHD	221-825-012-003C		LTS (Sp) woWC CG-IR
02308185	DEUTZ/KHD	221-825-012-001C		LTS (Sp) woWC CG-IR
0231127	DAF	360-081-029-001C		PS woWC CG
0231127	DAF	360-081-029-001K		PS woWC CG
02339010	CLAAS	232-011-017-016D		TSw -A- CG
0236776	DAF	360-081-032-002C		PS woWC IR
0240 5960 KZ 0144-51	IVECO/MAGIRUS	323-801-003-001D		TS woWC CG-IR
02406368	DEUTZ/KHD	360-081-030-025C		PS wWC CG
0243840	DAF	230-112-005-001C		PSw CG-IR
0245 5901 KZ 5051-72	IVECO/MAGIRUS	221-825-011-085C		LTS (Sp) woWC CG-IR
0248178	DAF	323-805-001-001K		TS woWC CG-IR
0248178	DAF	323-805-001-001N		TS woWC CG-IR
0248179	DAF	323-801-001-006N		TS woWC CG-IR
0248180	DAF	323-803-001-006D		TS wWC CG
0256 4075 KJ 5107-72	IVECO/MAGIRUS	224-082-007-009R		TTS 54 woWC CG-IR
026 542 01 17	MERCEDES-BENZ	360-081-032-003C		PS woWC IR
026 542 02 17	MERCEDES-BENZ	360-081-029-010C		PS woWC CG
026 542 02 17	MERCEDES-BENZ	360-081-029-010K		PS woWC CG
0267899	DAF	89-356-017		Accessory
03344066	DEUTZ/KHD	2-250-234		Accessory



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
0334 4066	IVECO/MAGIRUS	2-251-243		Accessory
0336 0847 EE 0144-51	IVECO/MAGIRUS	340-807-001-001C		RPM/SS Generator
0336 0847 KZ 0144-51	IVECO/MAGIRUS	340-807-001-001C		RPM/SS Generator
03360849	DEUTZ/KHD	232-011-005-015D		TSw -A- CG
03367212	DEUTZ/KHD	232-011-005-004D		TSw -A- CG
0337 0879 EE 0154-51	IVECO/MAGIRUS	360-081-030-008C		PS woWC CG
0379943	DAF	323-801-004-002N		TS woWC CG-IR
04189466	DEUTZ/KHD	360-081-062-004A		PS woWC CG
04189605	DEUTZ/KHD	323-805-042-001C		TS woWC CG-IR
04190809	DEUTZ/KHD	360-081-062-002A		PS woWC CG
04199522	DEUTZ/KHD	323-805-039-001C		TS woWC CG-IR
04199523	DEUTZ/KHD	360-081-032-060C		PS woWC IR
04342181	DEUTZ/KHD	221-825-024-001C		LTS woWC IR
04347114	DEUTZ/KHD	2-251-016		Accessory
04349404	DEUTZ/KHD	2-251-243		Accessory
04352572	DEUTZ/KHD	221-825-024-002C		LTS (Sp) woWC CG-IR
04356048	DEUTZ/KHD	221-825-024-006C		LTS (Sp) woWC CG-IR
04384139	DEUTZ/KHD	221-825-018-187C		LTS (Sp) woWC CG-IR
04389616	DEUTZ/KHD	89-356-017		Accessory
0446 1891	IVECO/MAGIRUS	323-801-001-040N		TS woWC CG-IR
0446 1891 ED 5049-64	IVECO/MAGIRUS	323-801-001-040N		TS woWC CG-IR
0446 1892 ED 5049-64	IVECO/MAGIRUS	360-081-029-038C		PS woWC CG
0450 2294 EE 5045-80	IVECO/MAGIRUS	230-112-005-004C		PSw CG-IR
047 919 501 A	VW-GROUP	323-801-017-001K		TS woWC CG-IR
047 919 501 A	VW-GROUP	323-801-017-001N		TS woWC CG-IR
047 919 501 A	VW-GROUP	323-801-017-002	323-801-017-001K	TS woWC CG-IR
047 919 501 A	VW-GROUP	323-801-017-002	323-801-017-001N	TS woWC CG-IR
0481 6993	IRISBUS	323-805-001-001K		TS woWC CG-IR
0481 6993	IRISBUS	323-805-001-001N		TS woWC CG-IR
0481 6993	IVECO/MAGIRUS	323-805-001-001N		TS woWC CG-IR
0486 0228	IVECO/MAGIRUS	221-826-014-012Z		LTS woWC IR
0501 203 072	ZF	323-803-006-002C		TS woWC CG
0501 205 316	ZF	323-801-004-002N		TS woWC CG-IR
0501 309 190	ZF	340-804-005-015C		RPM/SS Inductiv
0501 309 245	ZF	340-804-005-013A		RPM/SS Inductiv
0501 309 561	ZF	340-804-005-018C		RPM/SS Inductiv
0501 309 568	ZF	323-803-001-008D		TS woWC CG
0501 310 002	ZF	323-803-001-022D		TS woWC CG
0501 310 016	ZF	X10-232-001-001		TSw -B- IR
0501 310 091	ZF	340-216-010-004C		RPM/SS AOscillator
0501 311 517	ZF	340-804-005-020C		RPM/SS Inductiv
0501 313 475	ZF	323-803-002-002D		TS woWC CG
0501 313 968	ZF	340-804-005-028C		RPM/SS Inductiv
0503302	DAF	221-825-009-102C		LTS (Sp) woWC CG-IR
0524290	DAF	360-081-029-012C		PS woWC CG
0524290	DAF	360-081-029-012K		PS woWC CG
05767020	CLAAS	230-112-001-015C		PSw CG-IR
05850900	CLAAS	232-011-017-034D		TSw -A- CG
05859730	CLAAS	323-803-001-030D		TS woWC CG



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
06040150	CLAAS	340-811-001-003B		RPM/SS FGenerator
06253949	DEUTZ/KHD	323-801-001-029N		TS woWC CG-IR
06260431	DEUTZ/KHD	89-356-017		Accessory
06262123	DEUTZ/KHD	340-804-007-003C		RPM/SS Inductiv
0648634	DAF	323-803-006-002C		TS wWC CG
0652201	DAF	230-112-002-001C		PSw CG-IR
0654090	DAF	230-112-005-011C		PSw CG-IR
06575670	CLAAS	323-803-001-025D		TS wWC CG
06575680	CLAAS	323-803-004-002D		TS wWC CG
06578780	CLAAS	323-803-004-001D		TS wWC CG
06602270	CLAAS	323-801-001-006N		TS woWC CG-IR
0672060	DAF	323-803-001-001D		TS wWC CG
06729960	CLAAS	89-356-017		Accessory
06768350	CLAAS	340-804-007-011C		RPM/SS Inductiv
06768350	CLAAS	340-804-007-011G		RPM/SS Inductiv
0685537	DAF	325-805-003-001C		TS woWC CG-IR
0689296	DAF	232-011-017-032D		TSw -A- CG
07147050	CLAAS	323-801-001-008N		TS woWC CG-IR
07148060	CLAAS	323-801-003-001D		TS woWC CG-IR
07209060	CLAAS	2-250-234		Accessory
0744 105 020	ZF	232-011-017-032D		TSw -A- CG
0819 7899	IVECO/MAGIRUS	89-356-017		Accessory
090126512	ZF	340-804-006-007C		RPM/SS Inductiv
09946645	DEUTZ/KHD	360-081-030-009C		PS wWC CG
09946645	DEUTZ/KHD	360-081-030-009K		PS wWC CG
09974211	DEUTZ/KHD	360-081-032-011C		PS woWC IR
1.001.110	IRISBUS	2-251-243		Accessory
11039149	VOLVO	360-081-037-017C		PS woWC CG
11039662	VOLVO	340-804-005-015C		RPM/SS Inductiv
1136985	VOLVO	323-803-006-002C		TS wWC CG
1140043	DAF	360-081-029-026C		PS woWC CG
1140043	DAF	360-081-029-026K		PS woWC CG
11 65 2 230 283	BMW	323-801-010-003K		TS woWC CG-IR
12153470	DEUTZ/KHD	360-081-029-010C		PS woWC CG
12153470	DEUTZ/KHD	360-081-029-010K		PS woWC CG
12153471	DEUTZ/KHD	360-081-032-003C		PS woWC IR
12153671	DEUTZ/KHD	232-011-017-034D		TSw -A- CG
12153673	DEUTZ/KHD	323-801-001-006N		TS woWC CG-IR
12153674	DEUTZ/KHD	323-803-001-001D		TS wWC CG
12153927	DEUTZ/KHD	230-112-005-012C		PSw CG-IR
12153937	DEUTZ/KHD	230-112-004-004C		PSw CG-IR
122 115 671	VW-GROUP	232-011-017-075	232-011-017-103D	TSw -A- CG
122 115 671	VW-GROUP	232-011-017-103D		TSw -A- CG
1252558	OPEL	360-081-030-071C		PS wWC CG
1254516	OPEL	221-833-003-006Z		LTS (Sp) woWC CG-IR
1265058	DAF	230-112-005-006C		PSw CG-IR
1268667	DAF	360-081-030-017C		PS wWC CG
1323797	VOLVO	360-081-030-086C		PS wWC CG
1324624	VOLVO	323-801-012-001D		TS woWC CG-IR



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
1367253	VOLVO	221-824-019-019	221-824-019-022Z	LTS (Sp) woWC CG-IR
1367253	VOLVO	221-824-019-022Z		LTS (Sp) woWC CG-IR
14211931	VOLVO	2-251-016		Accessory
149653	SCANIA	360-081-032-001C		PS woWC IR
1507899	VOLVO	340-807-001-001C		RPM/SS Generator
154619	SCANIA	360-081-032-003C		PS woWC IR
1557007100261	ZF	340-804-007-019C		RPM/SS Inductiv
1578070	VOLVO	221-825-018-019Z		LTS woWC IR
16 12 1 114 254	BMW	224-817-012-001R		TTS (Sp) woWC CG-IR
16 14 1 152 266	BMW	224-817-022-007Z		TTS (Sp) woWC CG-IR
16 14 1 180 517	BMW	221-824-043-002Z		LTS (Sp) woWC CG-IR
16 14 1 358 097	BMW	224-082-019-007P		TTS (Sp) woWC CG-IR
17111670231	STEYR	2-250-234		Accessory
171 919 051 L	VW-GROUP	221-824-022-002Z		LTS (Sp) woWC CG-IR
192200230030	AGCO/FENDT	340-804-007-020C		RPM/SS Inductiv
195754	SCANIA	323-805-001-001K		TS woWC CG-IR
195754	SCANIA	323-805-001-001N		TS woWC CG-IR
1H0 919 051 K	VW-GROUP	221-824-053-001Z		LTS (Sp) woWC CG-IR
1H0 919 670	VW-GROUP	221-824-053-001Z		LTS (Sp) woWC CG-IR
1H0 919 673 C	VW-GROUP	221-833-002-011Z		LTS (Sp) woWC CG-IR
1H0 919 673 F	VW-GROUP	221-833-002-011Z		LTS (Sp) woWC CG-IR
1H0 919 673 K	VW-GROUP	221-833-002-011Z		LTS (Sp) woWC CG-IR
202 470 39 41	MERCEDES-BENZ	221-839-002-004Z		LTS woWC IR
208 470 10 41	MERCEDES-BENZ	221-839-001-014Z		LTS woWC IR
210603	SCANIA	323-805-003-001N		TS woWC CG-IR
2178744/0	STEYR	360-081-029-012C		PS woWC CG
2178744/0	STEYR	360-081-029-012K		PS woWC CG
2 230 281	BMW	360-081-030-009K		PS wWC CG
2 230 281	BMW	360-081-030-009C		PS wWC CG
2 230 282	BMW	360-081-032-003C		PS woWC IR
242162	SCANIA	323-801-001-006N		TS woWC CG-IR
250519	SCANIA	323-803-001-006D		TS wWC CG
251 919 051 E	VW-GROUP	221-824-022-001Z		LTS (Sp) woWC CG-IR
253527	SCANIA	360-081-029-038C		PS woWC CG
264816	SCANIA	340-804-005-007C		RPM/SS Inductiv
275750	SCANIA	360-081-030-063C		PS wWC CG
283591	VOLVO	360-081-029-012C		PS woWC CG
283591	VOLVO	360-081-029-012K		PS woWC CG
285905	SCANIA	360-081-030-075C		PS wWC CG
340025	SCANIA	340-804-005-002C		RPM/SS Inductiv
340492	SCANIA	221-825-023-009C		LTS woWC IR
345867	SCANIA	360-081-039-007C		PS wWC IR
3458882	VOLVO	221-824-034-008Z		LTS (Sp) woWC CG-IR
348875	SCANIA	323-803-002-010C		TS wWC CG
354671	VOLVO	340-804-007-004C		RPM/SS Inductiv
357 00 71 0011	MAN	360-081-053-003C		PS wWC CG
366906	VOLVO	360-081-030-052C		PS wWC CG
367882	VOLVO	232-011-017-004D		TSw -A- CG
373811	SCANIA	360-081-061-003C		PS wWC CG



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
374338	SCANIA	360-081-061-002C		PS wWC CG
380B 910701	MAN	2-250-234		Accessory
385200230030	AGCO/FENDT	340-804-007-019C		RPM/SS Inductiv
397946	SCANIA	360-081-061-006C		PS wWC CG
404 471 00 80	EVOBUS	2-251-243		Accessory
404 471 00 80	MERCEDES-BENZ	2-251-243		Accessory
4182 2164	IVECO/MAGIRUS	232-011-017-004D		TSw -A- CG
4191 4925	IVECO/MAGIRUS	323-801-013-001D		TS woWC CG-IR
4191 4925	IVECO/MAGIRUS	323-801-017-001K		TS woWC CG-IR
4191 4925	IVECO/MAGIRUS	323-801-017-001N		TS woWC CG-IR
4201 3805	IVECO/MAGIRUS	221-829-001-001C		LTS (Sp) woWC CG-IR
4205 6669	MERCEDES-BENZ	340-804-005-001C		RPM/SS Inductiv
4207 5385	IVECO/MAGIRUS	221-826-014-006Z		LTS woWC IR
4208 0907	IVECO/MAGIRUS	323-801-028-001C		TS (Sp) 2MS
4219 0221 EE 5045-80	IVECO/MAGIRUS	230-112-001-004C		PSw CG-IR
4252 2650	IVECO/MAGIRUS	323-803-002-007D		TS wWC CG
431 919 521 A	VW-GROUP	323-801-012-002D		TS woWC CG-IR
431 919 521 A	VW-GROUP	323-801-012-009	323-801-012-002D	TS woWC CG-IR
458884	VOLVO	221-824-034-008Z		LTS (Sp) woWC CG-IR
4742576	VOLVO	X10-224-014-023		TTS 80 woWC CG-IR
4780583	VOLVO	360-081-029-041C		PS woWC CG
4780747	VOLVO	360-081-029-042C		PS woWC CG
4780941	VOLVO	340-804-005-002C		RPM/SS Inductiv
4786127	VOLVO	360-081-037-007C		PS woWC CG
4880804	VOLVO	340-804-005-007C		RPM/SS Inductiv
4960070	VOLVO	323-801-004-007D		TS woWC CG-IR
5000295954	RENAULT	89-356-017		Accessory
5001834540	RENAULT	2-251-243		Accessory
50.27421-0017	MAN	323-803-001-004D		TS wWC CG
50.27421-0043	MAN	230-112-005-001C		PSw CG-IR
50.27421-0044	MAN	230-112-005-011C		PSw CG-IR
50.27421-0049	MAN	360-081-038-003C		PS woWC IR
50.27421-0051	MAN	360-081-030-017C		PS wWC CG
50.27421-0082	MAN	360-081-038-002C		PS woWC IR
50.61344-1000	MAN	323-805-001-001N		TS woWC CG-IR
50.61344-1000	MAN	323-805-001-001K		TS woWC CG-IR
50.76034-0007	MAN	360-081-032-003C		PS woWC IR
51.27420-0008	MAN	323-803-004-001D		TS wWC CG
51.27420-0015	MAN	323-803-004-003D		TS wWC CG
51.27420-0030	MAN	323-803-002-002D		TS wWC CG
51.27420-0073	MAN	323-805-039-001C		TS woWC CG-IR
51.27421-0094	MAN	360-081-038-001C		PS woWC IR
51.27421-0099	MAN	360-081-032-059C		PS woWC IR
525203	STILL	224-817-047-002R		TTS (Sp) woWC CG-IR
601 542 00 17	MERCEDES-BENZ	224-082-023-001P		TTS (Sp) woWC CG-IR
6041 315 007	ZF	340-804-005-007C		RPM/SS Inductiv
6041 315 007	ZF	340-804-003-001	340-804-005-007C	RPM/SS Inductiv
6.0568.50.9.0014	DEUTZ/KHD	232-011-017-035D	232-011-017-034D	TSw -A- CG
6.0568.50.9.0014	DEUTZ/KHD	232-011-017-034D		TSw -A- CG



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
6.0568.50.9.0030	DEUTZ/KHD	323-805-001-001K		TS woWC CG-IR
6.0568.50.9.0030	DEUTZ/KHD	323-805-001-001N		TS woWC CG-IR
6.0568.50.9.0034	DEUTZ/KHD	232-011-019-003D		TSw -A- CG
6.0578.20.1.0011	DEUTZ/KHD	230-112-005-012C		PSw CG-IR
610 003 1005	MOTOMETER	232-011-017-128D		TSw -A- CG
610 003 1030	MOTOMETER	232-011-017-129D		TSw -A- CG
614 09 0067	MAN	323-803-001-006D		TS wWC CG
614 09 0068	MAN	360-081-030-008C		PS wWC CG
614 09 0105	MAN	360-081-029-085C		PS woWC CG
62 16 1 358 097	BMW	224-082-019-007P		TTS (Sp) woWC CG-IR
62 16 1 360 870	BMW	323-803-001-022D		TS wWC CG
6228489	VOLVO	360-081-030-078C		PS wWC CG
6229967	VOLVO	323-801-004-006D		TS woWC CG-IR
6229969	VOLVO	323-801-001-026K		TS woWC CG-IR
6229969	VOLVO	323-801-001-026N		TS woWC CG-IR
6233384	VOLVO	340-808-001-002G		RPM/SS Generator
6233384	VOLVO	340-808-001-002C		RPM/SS Generator
6238400	VOLVO	360-081-037-010C		PS woWC CG
642572	SCANIA	340-804-007-001C		RPM/SS Inductiv
670093	SCANIA	232-011-017-032D		TSw -A- CG
692 00 71 0001	STEYR	360-081-030-107C		PS wWC CG
7111670231	STEYR	2-251-243		Accessory
7131930051	STEYR	360-081-030-017C		PS wWC CG
7.314.084.000.0	EVOBUS	360-081-063-003C		PS wWC IR
7.314.085.000.0	EVOBUS	360-081-064-004C		PS wWC IR
787400	IVECO/MAGIRUS	360-081-030-112C		PS wWC CG
79HB-10884-AA	FORD	323-801-001-022N		TS woWC CG-IR
81.12901-0004	MAN	2-251-243		Accessory
81.12901-0026	MAN	2-251-016		Accessory
81.25909-0015	MAN	340-804-005-001C		RPM/SS Inductiv
81.27120-0050	MAN	340-804-006-007C		RPM/SS Inductiv
81.27121-0002	MAN	340-807-001-001C		RPM/SS Generator
81.27121-0003	MAN	340-811-001-003B		RPM/SS FGenerator
81.27420-0013	MAN	232-011-017-010D		TSw -A- CG
81.27420-0023	MAN	232-011-005-004D		TSw -A- CG
81.27420-0049	MAN	323-803-004-003D		TS wWC CG
81.27420-0080	MAN	232-011-017-038D		TSw -A- CG
81.27421-0004	MAN	323-801-001-022N		TS woWC CG-IR
81.27421-0005	MAN	323-803-001-016D		TS wWC CG
81.27421-0018	MAN	323-801-004-002N		TS woWC CG-IR
81.27421-0019	MAN	323-803-006-002C		TS wWC CG
81.27421-0020	MAN	X10-224-009-048		TTS 80 woWC CG-IR
81.27421-0085	MAN	224-802-030-008B		TTS 54 wWC CG-IR
81.27421-0091	MAN	360-081-030-053C		PS wWC CG
81.27421-0097	MAN	360-081-063-001C		PS wWC IR
81.27421-0098	MAN	360-081-064-001C		PS wWC IR
81.27421-0109	MAN	360-081-064-003C		PS wWC CG
81.27422-0001	MAN	224-082-007-009R		TTS 54 woWC CG-IR
81.27901-0012	MAN	89-356-017		Accessory



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
8150500	VOLVO	340-216-007-001A	340-216-010-003C	RPM/SS AOscillator
8150500	VOLVO	340-216-010-003C		RPM/SS AOscillator
82.27421-0019	MAN	360-081-032-011C		PS woWC IR
82DB-10B921-AB	FORD	323-803-002-007D		TS wWC CG
8.361.000.002.0	EVOBUS	2-250-234		Accessory
866 839	VOLVO	360-081-054-002Z		RPM/SS Inductiv
8.743.083.000.0	EVOBUS	340-808-001-002C		RPM/SS Generator
8.743.319.015 0	EVOBUS	2-251-016		Accessory
8.743.413.000.0	EVOBUS	323-803-001-006D		TS wWC CG
8.743.440.000.0	EVOBUS	221-826-002-021C		LTS (Sp) woWC CG-IR
8.743.505.000.0	EVOBUS	323-803-001-004D		TS wWC CG
8.743.521.000.0	EVOBUS	360-081-030-074C		PS wWC CG
8.743.590.000.0	EVOBUS	360-081-034-004C		PS wWC CG
8.743.718.000.0	EVOBUS	232-011-017-078D		TSw -A- CG
8.743.719.000.0	EVOBUS	360-081-030-052C		PS wWC CG
8.743.720.000.0	EVOBUS	323-803-001-019D		TS wWC CG
8.749.071.000.0	EVOBUS	224-082-007-014R		TTS 54 woWC CG-IR
88.25909-6002	MAN	340-804-005-007C		RPM/SS Inductiv
88.25909-6002	MAN	340-804-003-001	340-804-005-007C	RPM/SS Inductiv
88.27421-6008	MAN	360-081-030-070C		PS wWC CG
88.27421-6010	MAN	360-081-032-008C		PS woWC IR
90040918	OPEL	360-081-030-071C		PS wWC CG
90504138	OPEL	221-833-003-006Z		LTS (Sp) woWC CG-IR
90512092	OPEL	221-833-003-006Z		LTS (Sp) woWC CG-IR
90.81616-1788	MAN	360-081-030-031C		PS wWC CG
914 201 891 00	PORSCHE	2-250-234		Accessory
928 606 203 01	PORSCHE	360-081-030-157C		PS wWC CG
928 641 030 01	PORSCHE	224-817-020-001Z		TTS (Sp) woWC CG-IR
931870	IVECO/MAGIRUS	340-804-005-002C		RPM/SS Inductiv
944 606 201 00	PORSCHE	323-801-001-006N		TS woWC CG-IR
96014422	OPEL	340-804-032-001Z		RPM/SS Inductiv
990 00 71 0055	MAN	323-801-009-003D		TS woWC CG-IR
991 12 55 0126	MAN	221-825-018-121C		LTS (Sp) woWC CG-IR
991 12 71 0002	MAN	340-807-001-001C		RPM/SS Generator
AL19509	JOHN DEERE	323-801-001-006N		TS woWC CG-IR
AL81358	JOHN DEERE	232-011-017-141D		TSw -A- CG
AZ12546	JOHN DEERE	340-808-001-002C		RPM/SS Generator
AZ12546	JOHN DEERE	340-808-001-002G		RPM/SS Generator
AZ35440	JOHN DEERE	323-803-001-032D		TS wWC CG
AZ48097	JOHN DEERE	232-011-017-139D		TSw -A- CG
B8 5200 0654395	MERCEDES-BENZ	340-808-001-002G		RPM/SS Generator
B8 5200 0654395	MERCEDES-BENZ	340-808-001-002C		RPM/SS Generator
ESR1223	LAND ROVER	221-824-055-001Z		LTS woWC IR
F182.900.020.040	AGCO/FENDT	323-801-005-005D		TS woWC CG-IR
F250.200.061.010	AGCO/FENDT	224-082-005-132R		TTS 54 woWC CG-IR
F250.200.061.020	AGCO/FENDT	2-250-234		Accessory
H198.903.020.010	AGCO/FENDT	232-011-017-135D		TSw -A- CG
H312.900.020.010	AGCO/FENDT	323-805-039-001C		TS woWC CG-IR
H312.970.020.020	AGCO/FENDT	360-081-032-060C		PS woWC IR



OE No.	Manufacturer	Article No.	Article No. (new)	Name of Article
H816.900.020.020	AGCO/FENDT	360-081-038-014C		PS woWC IR
H816.970.020.010	AGCO/FENDT	360-081-032-059C		PS woWC IR
L33601	JOHN DEERE	89-356-017		Accessory
PRT 019726 010	OPEL	340-804-007-001C		RPM/SS Inductiv
T10521147	JOHN DEERE	221-825-024-001C		LTS woWC IR
T11 919 081	VW-GROUP	360-081-030-009C		PS wWC CG
T11 919 081	VW-GROUP	360-081-030-009K		PS wWC CG
V28620330	OPEL	323-803-001-004D		TS wWC CG
X540.740.100.000	AGCO/FENDT	2-251-243		Accessory
X810.150.020.010	AGCO/FENDT	89-356-017		Accessory
X820.080.050	AGCO/FENDT	360-081-029-033C		PS woWC CG
X830.030.050	AGCO/FENDT	323-801-003-001D		TS woWC CG-IR
X830.030.053.000	AGCO/FENDT	323-801-001-006N		TS woWC CG-IR
X830.030.059	AGCO/FENDT	323-801-028-001C		TS (Sp) 2MS
X830.030.085	AGCO/FENDT	323-803-001-013D		TS wWC CG
X830.030.086.000	AGCO/FENDT	323-803-001-020D		TS wWC CG
X830.240.006	AGCO/FENDT	232-011-017-076D		TSw -A- CG
X830.240.013	AGCO/FENDT	232-011-017-032D		TSw -A- CG
XXX OLK 440	IVECO/MAGIRUS	323-801-028-001C		TS (Sp) 2MS



Cross-Reference Article No. > OE No. (sorted by manufacturer)

Article No.	OE No.	Article No. (new)	Name of Article
-------------	--------	-------------------	-----------------

AGCO / FENDT

224-082-005-132R	F250.200.061.010		TTS 54 woWC CG-IR
2-250-234	F250.200.061.020		Accessory
2-251-243	X540.740.100.000		Accessory
232-011-017-032D	X830.240.013		TSw -A- CG
232-011-017-076D	X830.240.006		TSw -A- CG
232-011-017-135D	H198.903.020.010		TSw -A- CG
323-801-001-006N	X830.030.053.000		TS woWC CG-IR
323-801-003-001D	X830.030.050		TS woWC CG-IR
323-801-005-005D	F182.900.020.040		TS woWC CG-IR
323-801-028-001C	X830.030.059		TS (Sp) 2MS
323-803-001-013D	X830.030.085		TS wWC CG
323-803-001-020D	X830.030.086.000		TS wWC CG
323-805-039-001C	H312.900.020.010		TS woWC CG-IR
340-804-007-019C	385200230030		RPM/SS Inductiv
340-804-007-020C	192200230030		RPM/SS Inductiv
360-081-029-033C	X820.080.050		PS woWC CG
360-081-032-059C	H816.970.020.010		PS woWC IR
360-081-032-060C	H312.970.020.020		PS woWC IR
360-081-038-014C	H816.900.020.020		PS woWC IR
89-356-017	X810.150.020.010		Accessory

AUDI → VW-GROUP

BMW

221-824-043-002Z	16 14 1 180 517		LTS (Sp) woWC CG-IR
224-082-019-007P	16 14 1 358 097		TTS (Sp) woWC CG-IR
224-082-019-007P	62 16 1 358 097		TTS (Sp) woWC CG-IR
224-817-012-001R	16 12 1 114 254		TTS (Sp) woWC CG-IR
224-817-022-007Z	16 14 1 152 266		TTS (Sp) woWC CG-IR
323-801-010-003K	11 65 2 230 283		TS woWC CG-IR
323-803-001-022D	62 16 1 360 870		TS wWC CG
360-081-030-009C	2 230 281		PS wWC CG
360-081-030-009K	2 230 281		PS wWC CG
360-081-032-003C	2 230 282		PS woWC IR



Article No.	OE No.	Article No. (new)	Name of Article
-------------	--------	-------------------	-----------------

CLAAS

221-825-011-135C	00716030		LTS (Sp) woWC CG-IR
221-825-012-042C	00718000		LTS (Sp) woWC CG-IR
2-250-234	07209060		Accessory
230-112-001-015C	05767020		PSw CG-IR
230-112-003-022C	01333200		PSw CG-IR
232-011-005-004D	01780280		TSw -A- CG
232-011-017-016D	02339010		TSw -A- CG
232-011-017-034D	05850900		TSw -A- CG
323-801-001-006N	06602270		TS woWC CG-IR
323-801-001-008N	07147050		TS woWC CG-IR
323-801-003-001D	07148060		TS woWC CG-IR
323-803-001-025D	06575670		TS wWC CG
323-803-001-030D	05859730		TS wWC CG
323-803-004-001D	06578780		TS wWC CG
323-803-004-002D	06575680		TS wWC CG
340-804-007-011C	06768350		RPM/SS Inductiv
340-804-007-011G	06768350		RPM/SS Inductiv
340-804-007-019C	00132300		RPM/SS Inductiv
340-811-001-003B	06040150		RPM/SS FGenerator
89-356-017	06729960		Accessory

DAF

221-825-008-048C	0104950		LTS (Sp) woWC CG-IR
221-825-009-102C	0503302		LTS (Sp) woWC CG-IR
230-112-002-001C	0652201		PSw CG-IR
230-112-005-001C	0243840		PSw CG-IR
230-112-005-006C	1265058		PSw CG-IR
230-112-005-011C	0654090		PSw CG-IR
232-011-017-032D	0689296		TSw -A- CG
323-801-001-006N	0248179		TS woWC CG-IR
323-801-004-002N	0379943		TS woWC CG-IR
323-803-001-001D	0672060		TS wWC CG
323-803-001-006D	0248180		TS wWC CG
323-803-006-002C	0648634		TS wWC CG
323-805-001-001K	0248178		TS woWC CG-IR



Article No.	OE No.	Article No. (new)	Name of Article
DAF			
323-805-001-001N	0248178		TS woWC CG-IR
325-805-003-001C	0685537		TS woWC CG-IR
340-804-005-002C	0103405		RPM/SS Inductiv
360-081-029-001C	0231127		PS woWC CG
360-081-029-001K	0231127		PS woWC CG
360-081-029-010C	0162112		PS woWC CG
360-081-029-010K	0162112		PS woWC CG
360-081-029-012C	0524290		PS woWC CG
360-081-029-012K	0524290		PS woWC CG
360-081-029-026C	1140043		PS woWC CG
360-081-029-026K	1140043		PS woWC CG
360-081-030-017C	1268667		PS wWC CG
360-081-032-002C	0236776		PS woWC IR
360-081-032-003C	0162113		PS woWC IR
89-356-017	0267899		Accessory

DEERE → JOHN DEERE**DEUTZ / KHD**

221-825-012-001C	02308185		LTS (Sp) woWC CG-IR
221-825-012-003C	02308169		LTS (Sp) woWC CG-IR
221-825-018-187C	04384139		LTS (Sp) woWC CG-IR
221-825-024-001C	04342181		LTS woWC IR
221-825-024-002C	04352572		LTS (Sp) woWC CG-IR
221-825-024-006C	04356048		LTS (Sp) woWC CG-IR
2-250-234	03344066		Accessory
2-251-016	04347114		Accessory
2-251-243	04349404		Accessory
230-112-004-004C	12153937		PSw CG-IR
230-112-005-001C	01169902		PSw CG-IR
230-112-005-012C	12153927		PSw CG-IR
230-112-005-012C	6.0578.20.1.0011		PSw CG-IR
232-011-005-004D	03367212		Tsw -A- CG
232-011-005-015D	03360849		Tsw -A- CG
232-011-005-027D	01173469		Tsw -A- CG
232-011-005-030D	01174555		Tsw -A- CG
232-011-017-034D	01260599		Tsw -A- CG
232-011-017-034D	12153671		Tsw -A- CG
232-011-017-034D	6.0568.50.9.0014		Tsw -A- CG
232-011-017-035D	6.0568.50.9.0014	232-011-017-034D	Tsw -A- CG
232-011-019-003D	6.0568.50.9.0034		Tsw -A- CG
323-801-001-006N	12153673		TS woWC CG-IR



Article No.	OE No.	Article No. (new)	Name of Article
323-801-001-029N	06253949		TS woWC CG-IR
323-801-028-001C	01177090		TS (Sp) 2MS
323-803-001-001D	12153674		TS wWC CG
323-803-002-002D	01262586		TS wWC CG
323-803-002-007D	01173672		TS wWC CG
323-803-002-016D	01179305		TS wWC CG
323-803-002-017D	01179304		TS wWC CG
323-803-002-019D	01180460		TS wWC CG
323-803-014-002D	01178104		TS wWC CG
323-803-014-002D	01179145		TS wWC CG
323-803-014-007C	01180664		TS wWC CG
323-804-004-010C	01177066		TS (Sp) Bi
323-805-001-001K	01163722		TS woWC CG-IR
323-805-001-001K	6.0568.50.9.0030		TS woWC CG-IR
323-805-001-001N	01163722		TS woWC CG-IR
323-805-001-001N	6.0568.50.9.0030		TS woWC CG-IR
323-805-039-001C	04199522		TS woWC CG-IR
323-805-042-001C	04189605		TS woWC CG-IR
340-804-007-003C	06262123		RPM/SS Inductiv
340-808-001-002C	01171283		RPM/SS Generator
340-808-001-002G	01171283		RPM/SS Generator
360-081-029-010C	12153470		PS woWC CG
360-081-029-010K	12153470		PS woWC CG
360-081-030-009C	09946645		PS wWC CG
360-081-030-009K	09946645		PS wWC CG
360-081-030-025C	02406368		PS wWC CG
360-081-030-037C	01162743		PS wWC CG
360-081-030-070C	01137306		PS wWC CG
360-081-032-003C	12153471		PS woWC IR
360-081-032-008C	01163720		PS woWC IR
360-081-032-011C	09974211		PS woWC IR
360-081-032-060C	04199523		PS woWC IR
360-081-053-003C	01179026		PS wWC CG
360-081-062-002A	04190809		PS wWC CG
360-081-062-003C	01179918		PS wWC CG
360-081-062-004A	04189466		PS wWC CG
360-081-062-005A	01181115KZ		PS wWC CG
89-356-017	04389616		Accessory
89-356-017	06260431		Accessory



Article No.	OE No.	Article No. (new)	Name of Article
-------------	--------	-------------------	-----------------

EVOBUS

221-825-011-132C	004 542 25 17		LTS (Sp) woWC CG-IR
221-826-002-021C	8.743.440.000.0		LTS (Sp) woWC CG-IR
224-082-007-014R	8.749.071.000.0		TTS 54 woWC CG-IR
2-250-234	8.361.000.002.0		Accessory
2-251-016	8.743.319.015 0		Accessory
2-251-243	404 471 00 80		Accessory
232-011-017-078D	8.743.718.000.0		TSw -A- CG
323-803-001-004D	8.743.505.000.0		TS wWC CG
323-803-001-006D	8.743.413.000.0		TS wWC CG
323-803-001-019D	8.743.720.000.0		TS wWC CG
340-808-001-002C	8.743.083.000.0		RPM/SS Generator
360-081-030-052C	8.743.719.000.0		PS wWC CG
360-081-030-074C	8.743.521.000.0		PS wWC CG
360-081-034-004C	8.743.590.000.0		PS wWC CG
360-081-063-003C	7.314.084.000.0		PS wWC IR
360-081-064-004C	7.314.085.000.0		PS wWC IR

FAUN

221-825-011-020C	-		LTS (Sp) woWC CG-IR
------------------	---	--	---------------------

FENDT → AGCO / FENDT

FORD

323-801-001-022N	79HB-10884-AA		TS woWC CG-IR
323-803-002-007D	82DB-10B921-AB		TS wWC CG

IRISBUS

2-251-243	1.001.110		Accessory
323-805-001-001K	0481 6993		TS woWC CG-IR
323-805-001-001N	0481 6993		TS woWC CG-IR



Article No.	OE No.	Article No. (new)	Name of Article
IVECO / MAGIRUS			
221-825-011-085C	0245 5901 KZ 5051-72		LTS (Sp) woWC CG-IR
221-826-014-006Z	4207 5385		LTS woWC IR
221-826-014-012Z	0486 0228		LTS woWC IR
221-829-001-001C	4201 3805		LTS (Sp) woWC CG-IR
224-082-007-009R	0256 4075 KJ 5107-72		TTS 54 woWC CG-IR
2-251-243	0334 4066		Accessory
230-112-001-004C	4219 0221 EE 5045-80		PSw CG-IR
230-112-005-004C	0450 2294 EE 5045-80		PSw CG-IR
232-011-005-028D	0117 3470 ES 8942-15		TSw -A- CG
232-011-017-004D	4182 2164		TSw -A- CG
323-801-001-040N	0446 1891		TS woWC CG-IR
323-801-001-040N	0446 1891 ED 5049-64		TS woWC CG-IR
323-801-003-001D	0240 5960 KZ 0144-51		TS woWC CG-IR
323-801-013-001D	4191 4925		TS woWC CG-IR
323-801-017-001K	4191 4925		TS woWC CG-IR
323-801-017-001N	4191 4925		TS woWC CG-IR
323-801-028-001C	4208 0907		TS (Sp) 2MS
323-801-028-001C	XXX OLK 440		TS (Sp) 2MS
323-803-002-002D	0126 2586 ED 8742-14		TS wWC CG
323-803-002-007D	0117 3672 EC 8942-14		TS wWC CG
323-803-002-007D	4252 2650		TS wWC CG
323-805-001-001N	0481 6993		TS woWC CG-IR
340-804-005-002C	931870		RPM/SS Inductiv
340-807-001-001C	0336 0847 EE 0144-51		RPM/SS Generator
340-807-001-001C	0336 0847 KZ 0144-51		RPM/SS Generator
360-081-029-038C	0446 1892 ED 5049-64		PS woWC CG
360-081-030-008C	0337 0879 EE 0154-51		PS wWC CG
360-081-030-112C	787400		PS wWC CG
89-356-017	0819 7899		Accessory

JOHN DEERE

221-825-024-001C	T10521147		LTS woWC IR
232-011-017-139D	AZ48097		TSw -A- CG
232-011-017-141D	AL81358		TSw -A- CG
323-801-001-006N	AL19509		TS woWC CG-IR
323-803-001-032D	AZ35440		TS wWC CG
340-808-001-002C	AZ12546		RPM/SS Generator
340-808-001-002G	AZ12546		RPM/SS Generator
89-356-017	L33601		Accessory



Article No.	OE No.	Article No. (new)	Name of Article
KÄSSBOHRER			
221-825-009-151C	-		LTS (Sp) woWC CG-IR

KHD → DEUTZ/KHD**KRAMER**

221-825-013-017C	-		LTS (Sp) woWC CG-IR
------------------	---	--	---------------------

LAND ROVER

221-824-055-001Z	ESR1223		LTS woWC IR
------------------	---------	--	-------------

MAGIRUS → IVECO / MAGIRUS**MAN**

221-825-018-121C	991 12 55 0126		LTS (Sp) woWC CG-IR
224-082-007-009R	81.27422-0001		TTS 54 woWC CG-IR
224-802-030-008B	81.27421-0085		TTS 54 wWC CG-IR
2-250-234	380B 910701		Accessory
2-251-016	81.12901-0026		Accessory
2-251-243	81.12901-0004		Accessory
230-112-005-001C	50.27421-0043		PSw CG-IR
230-112-005-011C	50.27421-0044		PSw CG-IR
232-011-005-004D	81.27420-0023		TSw -A- CG
232-011-017-010D	81.27420-0013		TSw -A- CG
232-011-017-038D	81.27420-0080		TSw -A- CG
323-801-001-022N	81.27421-0004		TS woWC CG-IR
323-801-004-002N	81.27421-0018		TS woWC CG-IR
323-801-009-003D	990 00 71 0055		TS woWC CG-IR
323-803-001-004D	50.27421-0017		TS wWC CG
323-803-001-006D	614 09 0067		TS wWC CG
323-803-001-016D	81.27421-0005		TS wWC CG
323-803-002-002D	51.27420-0030		TS wWC CG
323-803-004-001D	51.27420-0008		TS wWC CG
323-803-004-003D	51.27420-0015		TS wWC CG
323-803-004-003D	81.27420-0049		TS wWC CG



Article No.	OE No.	Article No. (new)	Name of Article
323-803-006-002C	81.27421-0019		TS wWC CG
323-805-001-001K	50.61344-1000		TS woWC CG-IR
323-805-001-001N	50.61344-1000		TS woWC CG-IR
323-805-039-001C	51.27420-0073		TS woWC CG-IR
340-804-003-001	88.25909-6002	340-804-005-007C	RPM/SS Inductiv
340-804-005-001C	81.25909-0015		RPM/SS Inductiv
340-804-005-007C	88.25909-6002		RPM/SS Inductiv
340-804-006-007C	81.27120-0050		RPM/SS Inductiv
340-807-001-001C	81.27121-0002		RPM/SS Generator
340-807-001-001C	991 12 71 0002		RPM/SS Generator
340-811-001-003B	81.27121-0003		RPM/SS FGenerator
360-081-029-085C	614 09 0105		PS woWC CG
360-081-030-001K	-		PS wWC CG
360-081-030-008C	614 09 0068		PS wWC CG
360-081-030-017C	50.27421-0051		PS wWC CG
360-081-030-031C	90.81616-1788		PS wWC CG
360-081-030-053C	81.27421-0091		PS wWC CG
360-081-030-070C	88.27421-6008		PS wWC CG
360-081-032-003C	50.76034-0007		PS woWC IR
360-081-032-008C	88.27421-6010		PS woWC IR
360-081-032-011C	82.27421-0019		PS woWC IR
360-081-032-059C	51.27421-0099		PS woWC IR
360-081-038-001C	51.27421-0094		PS woWC IR
360-081-038-002C	50.27421-0082		PS woWC IR
360-081-038-003C	50.27421-0049		PS woWC IR
360-081-053-003C	357 00 71 0011		PS wWC CG
360-081-063-001C	81.27421-0097		PS wWC IR
360-081-064-001C	81.27421-0098		PS wWC IR
360-081-064-003C	81.27421-0109		PS wWC CG
89-356-017	81.27901-0012		Accessory
X10-224-009-048	81.27421-0020		TTS 80 woWC CG-IR

MERCEDES-BENZ

221-824-054-003	011 542 60 17	221-824-054-049C	LTS woWC IR
221-824-054-005	011 542 62 17	221-824-054-050C	LTS woWC IR
221-824-054-007	011 542 64 17	221-824-054-051C	LTS woWC IR
221-824-054-009	011 542 66 17	221-824-054-052C	LTS woWC IR
221-824-054-026	011 542 75 17	221-824-054-054C	LTS woWC IR
221-824-054-027	012 542 95 17	221-824-054-055C	LTS woWC IR
221-824-054-028	012 542 79 17	221-824-054-056C	LTS woWC IR
221-824-054-049C	011 542 60 17		LTS woWC IR
221-824-054-050C	011 542 62 17		LTS woWC IR
221-824-054-051C	011 542 64 17		LTS woWC IR



Article No.	OE No.	Article No. (new)	Name of Article
MERCEDES-BENZ			
221-824-054-052C	011 542 66 17		LTS woWC IR
221-824-054-053C	011 542 68 17		LTS woWC IR
221-824-054-054C	011 542 75 17		LTS woWC IR
221-824-054-055C	012 542 95 17		LTS woWC IR
221-824-054-056C	012 542 79 17		LTS woWC IR
221-825-008-029C	001 542 75 17		LTS (Sp) woWC CG-IR
221-825-008-043C	001 542 97 17		LTS (Sp) woWC CG-IR
221-825-009-033C	000 542 63 17		LTS (Sp) woWC CG-IR
221-825-009-039C	000 542 81 17		LTS (Sp) woWC CG-IR
221-825-009-041C	-		LTS (Sp) woWC CG-IR
221-825-009-050N	002 542 67 17		LTS (Sp) woWC CG-IR
221-825-009-112C	001 542 93 17		LTS (Sp) woWC CG-IR
221-825-009-123C	001 542 19 17		LTS (Sp) woWC CG-IR
221-825-011-131C	005 542 69 17		LTS (Sp) woWC CG-IR
221-825-011-132C	004 542 25 17		LTS (Sp) woWC CG-IR
221-825-011-137C	006 542 74 17		LTS woWC IR
221-825-018-036Z	005 542 38 17		LTS (Sp) woWC CG-IR
221-825-018-042C	-		LTS (Sp) woWC CG-IR
221-825-018-046Z	005 542 41 17		LTS woWC IR
221-825-018-056Z	005 542 42 17		LTS woWC IR
221-825-018-100Z	008 542 80 17		LTS (Sp) woWC CG-IR
221-825-018-101Z	005 542 39 17		LTS (Sp) woWC CG-IR
221-825-022-018C	-		LTS (Sp) woWC CG-IR
221-839-001-014Z	208 470 10 41		LTS woWC IR
221-839-002-004Z	202 470 39 41		LTS woWC IR
224-082-023-001P	601 542 00 17		TTS (Sp) woWC CG-IR
2-251-243	404 471 00 80		Accessory
230-112-003-022C	000 153 32 32		PSw CG-IR
230-112-005-001C	000 542 32 17		PSw CG-IR
230-112-007-005C	000 153 48 32		PSw CG-IR
230-113-001-004C	001 542 33 17		PSw CG-IR
232-011-017-034D	006 545 56 24		TSw -A- CG
232-011-017-037D	006 545 87 24		TSw -A- CG
232-011-017-087D	004 545 60 24		TSw -A- CG
232-011-020-006E	004 545 01 24		TSw -A- CG
232-011-020-022E	005 545 76 24		TSw -A- CG
323-801-001-054D	001 542 23 17		TS woWC CG-IR
323-801-020-002D	005 542 10 17		TS woWC CG-IR
323-803-001-001D	001 542 84 17		TS wWC CG
323-803-001-013D	008 542 10 17		TS wWC CG
323-803-004-001D	002 542 73 17		TS wWC CG
323-803-004-002D	004 542 56 17		TS wWC CG
323-803-004-003D	000 000 58 33		TS wWC CG
323-803-004-007D	007 542 09 17		TS wWC CG
323-805-001-001K	002 542 75 17		TS woWC CG-IR
323-805-001-001N	002 542 75 17		TS woWC CG-IR
340-216-008-004Z	012 542 49 17		RPM/SS AOscillator



Article No.	OE No.	Article No. (new)	Name of Article
MERCEDES-BENZ			
340-216-008-010Z	013 542 62 17		RPM/SS AOscillator
340-216-010-004C	010 542 85 17		RPM/SS AOscillator
340-804-005-001C	001 153 78 28		RPM/SS Inductiv
340-804-005-001C	4205 6669		RPM/SS Inductiv
340-804-005-002C	002 542 26 17		RPM/SS Inductiv
340-804-005-013A	006 542 69 17		RPM/SS Inductiv
340-804-005-015C	006 542 71 17		RPM/SS Inductiv
340-804-005-018C	006 542 88 17		RPM/SS Inductiv
340-804-005-020C	008 542 18 17		RPM/SS Inductiv
340-804-077-006Z	000 153 95 20		RPM/SS Inductiv
340-804-077-010Z	001 153 02 20		RPM/SS Inductiv
340-804-077-011Z	001 153 04 20		RPM/SS Inductiv
340-807-001-001C	001 542 26 17		RPM/SS Generator
340-808-001-002C	B8 5200 0654395		RPM/SS Generator
340-808-001-002G	B8 5200 0654395		RPM/SS Generator
360-081-029-001C	001 542 21 17		PS woWC CG
360-081-029-001K	001 542 21 17		PS woWC CG
360-081-029-010C	026 542 02 17		PS woWC CG
360-081-029-010K	026 542 02 17		PS woWC CG
360-081-029-025C	001 542 82 17		PS woWC CG
360-081-029-025K	001 542 82 17		PS woWC CG
360-081-029-059C	004 542 43 17		PS woWC CG
360-081-029-065C	004 542 89 17		PS woWC CG
360-081-029-085C	006 542 32 17		PS woWC CG
360-081-029-087C	005 542 18 17		PS woWC CG
360-081-030-036C	003 542 55 17		PS wWC CG
360-081-030-036K	003 542 55 17		PS wWC CG
360-081-032-003C	026 542 01 17		PS woWC IR
360-081-032-060C	012 542 05 17		PS woWC IR
360-081-034-002C	001 542 56 17		PS wWC CG
360-081-034-004C	002 542 17 17		PS wWC CG
360-081-052-003C	006 542 94 17		PS woWC CG
362-081-003-001C	000 542 14 25		PS woWC CG
89-356-017	000 997 51 49		Accessory

MOTOMETER

232-011-017-128D	610 003 1005		TSw -A- CG
232-011-017-129D	610 003 1030		TSw -A- CG



Article No.	OE No.	Article No. (new)	Name of Article
-------------	--------	-------------------	-----------------

OPEL

221-833-003-006Z	1254516		LTS (Sp) woWC CG-IR
221-833-003-006Z	90504138		LTS (Sp) woWC CG-IR
221-833-003-006Z	90512092		LTS (Sp) woWC CG-IR
323-803-001-004D	V28620330		TS wWC CG
340-804-007-001C	PRT 019726 010		RPM/SS Inductiv
340-804-032-001Z	96014422		RPM/SS Inductiv
360-081-030-071C	1252558		PS wWC CG
360-081-030-071C	90040918		PS wWC CG

PORSCHE

224-817-020-001Z	928 641 030 01		TTS (Sp) woWC CG-IR
2-250-234	914 201 891 00		Accessory
323-801-001-006N	944 606 201 00		TS woWC CG-IR
360-081-030-157C	928 606 203 01		PS wWC CG

RENAULT

2-251-243	5001834540		Accessory
89-356-017	5000295954		Accessory

SAURER - CH

221-825-011-133C	-		LTS (Sp) woWC CG-IR
------------------	---	--	---------------------

SCANIA

221-825-023-009C	340492		LTS woWC IR
232-011-017-032D	670093		TSw -A- CG
323-801-001-006N	242162		TS woWC CG-IR
323-803-001-006D	250519		TS wWC CG
323-803-002-010C	348875		TS wWC CG
323-805-001-001K	195754		TS woWC CG-IR
323-805-001-001N	195754		TS woWC CG-IR
323-805-003-001N	210603		TS woWC CG-IR
340-804-005-002C	340025		RPM/SS Inductiv
340-804-005-007C	264816		RPM/SS Inductiv
340-804-007-001C	642572		RPM/SS Inductiv
360-081-029-038C	253527		PS woWC CG



Article No.	OE No.	Article No. (new)	Name of Article
-------------	--------	-------------------	-----------------

SCANIA

360-081-030-063C	275750		PS wWC CG
360-081-030-075C	285905		PS wWC CG
360-081-032-001C	149653		PS woWC IR
360-081-032-003C	154619		PS woWC IR
360-081-039-007C	345867		PS wWC IR
360-081-061-002C	374338		PS wWC CG
360-081-061-003C	373811		PS wWC CG
360-081-061-006C	397946		PS wWC CG

SEAT → VW-GROUP

SKODA → VW-GROUP

STEYR

221-825-009-136C	-		LTS (Sp) woWC CG-IR
2-250-234	17111670231		Accessory
2-251-243	7111670231		Accessory
360-081-029-012C	2178744/0		PS woWC CG
360-081-029-012K	2178744/0		PS woWC CG
360-081-030-017C	7131930051		PS wWC CG
360-081-030-107C	692 00 71 0001		PS wWC CG

STILL

224-817-047-002R	525203		TTS (Sp) woWC CG-IR
------------------	--------	--	---------------------

VOITH

360-081-029-086	-	360-081-029-087C	PS woWC CG
360-081-029-087C	-		PS woWC CG



Article No.	OE No.	Article No. (new)	Name of Article
VOLVO			
221-824-019-019	1367253	221-824-019-022Z	LTS (Sp) woWC CG-IR
221-824-019-022Z	1367253		LTS (Sp) woWC CG-IR
221-824-034-008Z	3458882		LTS (Sp) woWC CG-IR
221-824-034-008Z	458884		LTS (Sp) woWC CG-IR
221-825-018-019Z	1578070		LTS woWC IR
221-825-018-097A	-		LTS (Sp) woWC CG-IR
2-251-016	14211931		Accessory
232-011-017-004D	367882		TSw -A- CG
323-801-001-026K	6229969		TS woWC CG-IR
323-801-001-026N	6229969		TS woWC CG-IR
323-801-004-006D	6229967		TS woWC CG-IR
323-801-004-007D	4960070		TS woWC CG-IR
323-801-012-001D	1324624		TS woWC CG-IR
323-803-006-002C	1136985		TS wWC CG
340-216-007-001A	8150500	340-216-010-003C	RPM/SS AOscillator
340-216-010-003C	8150500		RPM/SS AOscillator
340-804-005-002C	4780941		RPM/SS Inductiv
340-804-005-007C	4880804		RPM/SS Inductiv
340-804-005-015C	11039662		RPM/SS Inductiv
340-804-007-004C	354671		RPM/SS Inductiv
340-807-001-001C	1507899		RPM/SS Generator
340-808-001-002C	6233384		RPM/SS Generator
340-808-001-002G	6233384		RPM/SS Generator
360-081-029-012C	283591		PS woWC CG
360-081-029-012K	283591		PS woWC CG
360-081-029-041C	4780583		PS woWC CG
360-081-029-042C	4780747		PS woWC CG
360-081-030-052C	366906		PS wWC CG
360-081-030-078C	6228489		PS wWC CG
360-081-030-086C	1323797		PS wWC CG
360-081-037-007C	4786127		PS woWC CG
360-081-037-010C	6238400		PS woWC CG
360-081-037-017C	11039149		PS woWC CG
360-081-051-012C	-		PS woWC IR
360-081-051-013C	-		PS woWC IR
360-081-054-002Z	866 839		PS woWC IR
X10-224-014-023	4742576		TTS 80 woWC CG-IR



Article No.	OE No.	Article No. (new)	Name of Article
221-824-022-001Z	251 919 051 E		LTS (Sp) woWC CG-IR
221-824-022-002Z	171 919 051 L		LTS (Sp) woWC CG-IR
221-824-053-001Z	1H0 919 051 K		LTS (Sp) woWC CG-IR
221-824-053-001Z	1H0 919 670		LTS (Sp) woWC CG-IR
221-833-002-011Z	1H0 919 673 C		LTS (Sp) woWC CG-IR
221-833-002-011Z	1H0 919 673 F		LTS (Sp) woWC CG-IR
221-833-002-011Z	1H0 919 673 K		LTS (Sp) woWC CG-IR
232-011-017-075	122 115 671	232-011-017-103D	TSw -A- CG
232-011-017-103D	122 115 671		TSw -A- CG
323-801-012-002D	431 919 521 A		TS woWC CG-IR
323-801-012-009	431 919 521 A	323-801-012-002D	TS woWC CG-IR
323-801-017-001K	047 919 501 A		TS woWC CG-IR
323-801-017-001N	047 919 501 A		TS woWC CG-IR
323-801-017-002	047 919 501 A	323-801-017-001K	TS woWC CG-IR
323-801-017-002	047 919 501 A	323-801-017-001N	TS woWC CG-IR
360-081-030-009C	T11 919 081		PS wWC CG
360-081-030-009K	T11 919 081		PS wWC CG

ZF

232-011-017-032D	0744 105 020		TSw -A- CG
323-801-004-002N	0501 205 316		TS woWC CG-IR
323-803-001-008D	0501 309 568		TS wWC CG
323-803-001-022D	0501 310 002		TS wWC CG
323-803-002-002D	0501 313 475		TS wWC CG
323-803-006-002C	0501 203 072		TS wWC CG
340-216-010-004C	0501 310 091		RPM/SS AOscillator
340-804-003-001	6041 315 007	340-804-005-007C	RPM/SS Inductiv
340-804-005-007C	6041 315 007		RPM/SS Inductiv
340-804-005-013A	0501 309 245		RPM/SS Inductiv
340-804-005-015C	0501 309 190		RPM/SS Inductiv
340-804-005-018C	0501 309 561		RPM/SS Inductiv
340-804-005-020C	0501 311 517		RPM/SS Inductiv
340-804-005-028C	0501 313 968		RPM/SS Inductiv
340-804-006-007C	090126512		RPM/SS Inductiv
340-804-007-019C	1557007100261		RPM/SS Inductiv
X10-232-001-001	0501 310 016		TSw -B- IR



Cross-Reference

Article No. > OE No. (all manufacturers)

Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
221-824-019-019	1367253	VOLVO	221-824-019-022Z	LTS (Sp) woWC CG-IR
221-824-019-022Z	1367253	VOLVO		LTS (Sp) woWC CG-IR
221-824-022-001Z	251 919 051 E	VW-GROUP		LTS (Sp) woWC CG-IR
221-824-022-002Z	171 919 051 L	VW-GROUP		LTS (Sp) woWC CG-IR
221-824-034-008Z	3458882	VOLVO		LTS (Sp) woWC CG-IR
221-824-034-008Z	458884	VOLVO		LTS (Sp) woWC CG-IR
221-824-043-002Z	16 14 1 180 517	BMW		LTS (Sp) woWC CG-IR
221-824-053-001Z	1H0 919 051 K	VW-GROUP		LTS (Sp) woWC CG-IR
221-824-053-001Z	1H0 919 670	VW-GROUP		LTS (Sp) woWC CG-IR
221-824-054-003	011 542 60 17	MERCEDES-BENZ	221-824-054-049C	LTS woWC IR
221-824-054-005	011 542 62 17	MERCEDES-BENZ	221-824-054-050C	LTS woWC IR
221-824-054-007	011 542 64 17	MERCEDES-BENZ	221-824-054-051C	LTS woWC IR
221-824-054-009	011 542 66 17	MERCEDES-BENZ	221-824-054-052C	LTS woWC IR
221-824-054-026	011 542 75 17	MERCEDES-BENZ	221-824-054-054C	LTS woWC IR
221-824-054-027	012 542 95 17	MERCEDES-BENZ	221-824-054-055C	LTS woWC IR
221-824-054-028	012 542 79 17	MERCEDES-BENZ	221-824-054-056C	LTS woWC IR
221-824-054-049C	011 542 60 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-050C	011 542 62 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-051C	011 542 64 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-052C	011 542 66 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-053C	011 542 68 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-054C	011 542 75 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-055C	012 542 95 17	MERCEDES-BENZ		LTS woWC IR
221-824-054-056C	012 542 79 17	MERCEDES-BENZ		LTS woWC IR
221-824-055-001Z	ESR1223	LAND ROVER		LTS woWC IR
221-825-008-029C	001 542 75 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-008-043C	001 542 97 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-008-048C	0104950	DAF		LTS (Sp) woWC CG-IR
221-825-009-033C	000 542 63 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-009-039C	000 542 81 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-009-041C	-	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-009-050N	002 542 67 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-009-102C	0503302	DAF		LTS (Sp) woWC CG-IR
221-825-009-112C	001 542 93 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-009-123C	001 542 19 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-009-136C	-	STEYR		LTS (Sp) woWC CG-IR
221-825-009-151C	-	KÄSSBOHRER		LTS (Sp) woWC CG-IR
221-825-011-020C	-	FAUN		LTS (Sp) woWC CG-IR
221-825-011-085C	0245 5901 KZ 5051-72	IVECO/MAGIRUS		LTS (Sp) woWC CG-IR
221-825-011-100C	-	-		LTS (Sp) woWC CG-IR
221-825-011-131C	005 542 69 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-011-132C	004 542 25 17	EOBUS		LTS (Sp) woWC CG-IR
221-825-011-132C	004 542 25 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
221-825-011-133C	-	SAURER - CH		LTS (Sp) woWC CG-IR
221-825-011-135C	00716030	CLAAS		LTS (Sp) woWC CG-IR
221-825-011-137C	006 542 74 17	MERCEDES-BENZ		LTS woWC IR
221-825-012-003C	02308169	DEUTZ/KHD		LTS (Sp) woWC CG-IR
221-825-012-042C	00718000	CLAAS		LTS (Sp) woWC CG-IR
221-825-013-017C	-	KRAMER		LTS (Sp) woWC CG-IR
221-825-018-019Z	1578070	VOLVO		LTS woWC IR
221-825-018-036Z	005 542 38 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-018-042C	-	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-018-046Z	005 542 41 17	MERCEDES-BENZ		LTS woWC IR
221-825-018-056Z	005 542 42 17	MERCEDES-BENZ		LTS woWC IR
221-825-018-096Z	-	-		LTS woWC IR
221-825-018-097A	-	VOLVO		LTS (Sp) woWC CG-IR
221-825-018-100Z	008 542 80 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-018-101Z	005 542 39 17	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-018-112Z	-	-		LTS woWC IR
221-825-018-121C	991 12 55 0126	MAN		LTS (Sp) woWC CG-IR
221-825-018-187C	04384139	DEUTZ/KHD		LTS (Sp) woWC CG-IR
221-825-022-018C	-	MERCEDES-BENZ		LTS (Sp) woWC CG-IR
221-825-023-009C	340492	SCANIA		LTS woWC IR
221-825-024-001C	04342181	DEUTZ/KHD		LTS woWC IR
221-825-024-001C	T10521147	JOHN DEERE		LTS woWC IR
221-825-024-002C	04352572	DEUTZ/KHD		LTS (Sp) woWC CG-IR
221-825-024-006C	04356048	DEUTZ/KHD		LTS (Sp) woWC CG-IR
221-825-025-002C	-	-		LTS (Sp) woWC CG-IR
221-826-002-021C	8.743.440.000.0	EVOBUS		LTS (Sp) woWC CG-IR
221-826-014-001Z	-	-		LTS woWC IR
221-826-014-006Z	4207 5385	IVECO/MAGIRUS		LTS woWC IR
221-826-014-012Z	0486 0228	IVECO/MAGIRUS		LTS woWC IR
221-829-001-001C	4201 3805	IVECO/MAGIRUS		LTS (Sp) woWC CG-IR
221-833-002-011Z	1H0 919 673 C	VW-GROUP		LTS (Sp) woWC CG-IR
221-833-002-011Z	1H0 919 673 F	VW-GROUP		LTS (Sp) woWC CG-IR
221-833-002-011Z	1H0 919 673 K	VW-GROUP		LTS (Sp) woWC CG-IR
221-833-003-006Z	1254516	OPEL		LTS (Sp) woWC CG-IR
221-833-003-006Z	90504138	OPEL		LTS (Sp) woWC CG-IR
221-833-003-006Z	90512092	OPEL		LTS (Sp) woWC CG-IR
221-839-001-014Z	208 470 10 41	MERCEDES-BENZ		LTS woWC IR
221-839-002-004Z	202 470 39 41	MERCEDES-BENZ		LTS woWC IR
224-082-005-095R	-	-		TTS 54 woWC CG-IR
224-082-005-101R	-	-		TTS 54 woWC CG-IR
224-082-005-118R	-	-		TTS 54 woWC CG-IR
224-082-005-132R	F250.200.061.010	AGCO/FENDT		TTS 54 woWC CG-IR
224-082-005-162R	-	-		TTS 54 woWC CG-IR



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
224-082-007-009R	0256 4075 KJ 5107-72	IVECO/MAGIRUS		TTS 54 woWC CG-IR
224-082-007-009R	81.27422-0001	MAN		TTS 54 woWC CG-IR
224-082-007-014R	8.749.071.000.0	EVOBUS		TTS 54 woWC CG-IR
224-082-007-023R	-	-		TTS 54 woWC CG-IR
224-082-008-008R	-	-		TTS 54 woWC CG-IR
224-082-008-018R	-	-		TTS 54 woWC CG-IR
224-082-009-029R	-	-	X10-224-009-029	TTS 80 woWC CG-IR
224-082-009-037R	-	-	X10-224-009-037	TTS 80 woWC CG-IR
224-082-009-040R	-	-	X10-224-009-040	TTS 80 woWC CG-IR
224-082-014-002R	-	-	X10-224-014-002	TTS 80 woWC CG-IR
224-082-014-011R	-	-	X10-224-014-011	TTS 80 woWC CG-IR
224-082-014-015R	-	-	X10-224-014-015	TTS 80 woWC CG-IR
224-082-014-030C	-	-	X10-224-014-030	TTS 80 woWC CG-IR
224-082-014-044C	-	-	X10-224-014-044	TTS 80 woWC CG-IR
224-082-019-007P	16 14 1 358 097	BMW		TTS (Sp) woWC CG-IR
224-082-019-007P	62 16 1 358 097	BMW		TTS (Sp) woWC CG-IR
224-082-021-001R	-	-	X10-224-021-001	TTS 80 woWC CG-IR
224-082-021-005R	-	-	X10-224-021-005	TTS 80 woWC CG-IR
224-082-023-001P	601 542 00 17	MERCEDES-BENZ		TTS (Sp) woWC CG-IR
224-802-030-008B	81.27421-0085	MAN		TTS 54 woWC CG-IR
224-817-012-001R	16 12 1 114 254	BMW		TTS (Sp) woWC CG-IR
224-817-020-001Z	928 641 030 01	PORSCHE		TTS (Sp) woWC CG-IR
224-817-022-007Z	16 14 1 152 266	BMW		TTS (Sp) woWC CG-IR
224-817-047-002R	525203	STILL		TTS (Sp) woWC CG-IR
2-250-234	03344066	DEUTZ/KHD		Accessory
2-250-234	07209060	CLAAS		Accessory
2-250-234	17111670231	STEYR		Accessory
2-250-234	380B 910701	MAN		Accessory
2-250-234	8.361.000.002.0	EVOBUS		Accessory
2-250-234	914 201 891 00	PORSCHE		Accessory
2-250-234	F250.200.061.020	AGCO/FENDT		Accessory
2-250-264	-	-		Accessory
2-251-006	-	-		Accessory
2-251-016	04347114	DEUTZ/KHD		Accessory
2-251-016	14211931	VOLVO		Accessory
2-251-016	8.743.319.015 0	EVOBUS		Accessory
2-251-016	81.12901-0026	MAN		Accessory
2-251-243	0334 4066	IVECO/MAGIRUS		Accessory
2-251-243	04349404	DEUTZ/KHD		Accessory
2-251-243	1.001.110	IRISBUS		Accessory
2-251-243	404 471 00 80	EVOBUS		Accessory
2-251-243	404 471 00 80	MERCEDES-BENZ		Accessory
2-251-243	5001834540	RENAULT		Accessory
2-251-243	7111670231	STEYR		Accessory
2-251-243	81.12901-0004	MAN		Accessory
2-251-243	X540.740.100.000	AGCO/FENDT		Accessory
226-801-015-001G	-	-		LTS (Ver) woWC IR
230-112-001-001C	-	-		PSw CG-IR
230-112-001-002C	-	-		PSw CG-IR



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
230-112-001-004C	4219 0221 EE 5045-80	IVECO/MAGIRUS		PSw CG-IR
230-112-001-005C	-	-		PSw CG-IR
230-112-001-015C	05767020	CLAAS		PSw CG-IR
230-112-002-001C	0652201	DAF		PSw CG-IR
230-112-003-012C	-	-		PSw CG-IR
230-112-003-013C	-	-		PSw CG-IR
230-112-003-015C	-	-		PSw CG-IR
230-112-003-022C	000 153 32 32	MERCEDES-BENZ		PSw CG-IR
230-112-003-022C	01333200	CLAAS		PSw CG-IR
230-112-004-004C	12153937	DEUTZ/KHD		PSw CG-IR
230-112-005-001C	000 542 32 17	MERCEDES-BENZ		PSw CG-IR
230-112-005-001C	01169902	DEUTZ/KHD		PSw CG-IR
230-112-005-001C	0243840	DAF		PSw CG-IR
230-112-005-001C	50.27421-0043	MAN		PSw CG-IR
230-112-005-003C	-	-		PSw CG-IR
230-112-005-004C	0450 2294 EE 5045-80	IVECO/MAGIRUS		PSw CG-IR
230-112-005-005C	-	-		PSw CG-IR
230-112-005-006C	1265058	DAF		PSw CG-IR
230-112-005-010C	-	-		PSw CG-IR
230-112-005-011C	0654090	DAF		PSw CG-IR
230-112-005-011C	50.27421-0044	MAN		PSw CG-IR
230-112-005-012C	12153927	DEUTZ/KHD		PSw CG-IR
230-112-005-012C	6.0578.20.1.0011	DEUTZ/KHD		PSw CG-IR
230-112-007-005C	000 153 48 32	MERCEDES-BENZ		PSw CG-IR
230-113-001-004C	001 542 33 17	MERCEDES-BENZ		PSw CG-IR
230-113-001-008C	-	-		PSw CG-IR
230-213-001-011C	-	-		PSw CG-IR
230-213-001-021C	-	-		PSw CG-IR
230-213-002-001C	-	-		PSw CG-IR
230-213-002-003C	-	-		PSw CG-IR
230-213-002-004C	-	-		PSw CG-IR
232-011-005-003D	-	-		TSw -A- CG
232-011-005-004D	01780280	CLAAS		TSw -A- CG
232-011-005-004D	03367212	DEUTZ/KHD		TSw -A- CG
232-011-005-004D	81.27420-0023	MAN		TSw -A- CG
232-011-005-015D	03360849	DEUTZ/KHD		TSw -A- CG
232-011-005-017D	-	-		TSw -A- CG
232-011-005-019D	-	-		TSw -A- CG
232-011-005-027D	01173469	DEUTZ/KHD		TSw -A- CG
232-011-005-028D	0117 3470 ES 8942-15	IVECO/MAGIRUS		TSw -A- CG
232-011-005-030D	01174555	DEUTZ/KHD		TSw -A- CG
232-011-017-004D	367882	VOLVO		TSw -A- CG
232-011-017-004D	4182 2164	IVECO/MAGIRUS		TSw -A- CG
232-011-017-005D	-	-		TSw -A- CG
232-011-017-010D	81.27420-0013	MAN		TSw -A- CG
232-011-017-016D	02339010	CLAAS		TSw -A- CG
232-011-017-017D	-	-		TSw -A- CG
232-011-017-032D	0689296	DAF		TSw -A- CG
232-011-017-032D	0744 105 020	ZF		TSw -A- CG



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
232-011-017-032D	670093	SCANIA		TSw -A- CG
232-011-017-032D	X830.240.013	AGCO/FENDT		TSw -A- CG
232-011-017-033D	-	-		TSw -A- CG
232-011-017-034D	006 545 56 24	MERCEDES-BENZ		TSw -A- CG
232-011-017-034D	01260599	DEUTZ/KHD		TSw -A- CG
232-011-017-034D	05850900	CLAAS		TSw -A- CG
232-011-017-034D	12153671	DEUTZ/KHD		TSw -A- CG
232-011-017-034D	6.0568.50.9.0014	DEUTZ/KHD		TSw -A- CG
232-011-017-035D	6.0568.50.9.0014	DEUTZ/KHD	232-011-017-034D	TSw -A- CG
232-011-017-037D	006 545 87 24	MERCEDES-BENZ		TSw -A- CG
232-011-017-038D	81.27420-0080	MAN		TSw -A- CG
232-011-017-041D	-	-		TSw -A- CG
232-011-017-075	122 115 671	VW-GROUP	232-011-017-103D	TSw -A- CG
232-011-017-076D	X830.240.006	AGCO/FENDT		TSw -A- CG
232-011-017-078D	8.743.718.000.0	EVOBUS		TSw -A- CG
232-011-017-080D	-	-		TSw -A- CG
232-011-017-085D	-	-	232-011-017-034D	TSw -A- CG
232-011-017-087D	004 545 60 24	MERCEDES-BENZ		TSw -A- CG
232-011-017-089D	-	-		TSw -A- CG
232-011-017-099D	-	-		TSw -A- CG
232-011-017-103D	122 115 671	VW-GROUP		TSw -A- CG
232-011-017-128D	610 003 1005	MOTOMETER		TSw -A- CG
232-011-017-129D	610 003 1030	MOTOMETER		TSw -A- CG
232-011-017-135D	H198.903.020.010	AGCO/FENDT		TSw -A- CG
232-011-017-139D	AZ48097	JOHN DEERE		TSw -A- CG
232-011-017-141D	AL81358	JOHN DEERE		TSw -A- CG
232-011-017-143D	-	-		TSw -A- CG
232-011-017-145D	-	-		TSw -A- CG
232-011-017-147D	-	-		TSw -A- CG
232-011-017-148D	-	-		TSw -A- CG
232-011-019-003D	6.0568.50.9.0034	DEUTZ/KHD		TSw -A- CG
232-011-020-006E	004 545 01 24	MERCEDES-BENZ		TSw -A- CG
232-011-020-022E	005 545 76 24	MERCEDES-BENZ		TSw -A- CG
232-030-003-043C	-	-	X10-232-001-001	TSw -B- IR
323-801-001-006N	0248179	DAF		TS woWC CG-IR
323-801-001-006N	06602270	CLAAS		TS woWC CG-IR
323-801-001-006N	12153673	DEUTZ/KHD		TS woWC CG-IR
323-801-001-006N	242162	SCANIA		TS woWC CG-IR
323-801-001-006N	944 606 201 00	PORSCHE		TS woWC CG-IR
323-801-001-006N	AL19509	JOHN DEERE		TS woWC CG-IR
323-801-001-006N	X830.030.053.000	AGCO/FENDT		TS woWC CG-IR
323-801-001-007N	-	-		TS woWC CG-IR
323-801-001-008N	07147050	CLAAS		TS woWC CG-IR
323-801-001-009N	-	-		TS woWC CG-IR
323-801-001-010K	-	-		TS woWC CG-IR
323-801-001-010N	-	-		TS woWC CG-IR
323-801-001-022N	79HB-10884-AA	FORD		TS woWC CG-IR
323-801-001-022N	81.27421-0004	MAN		TS woWC CG-IR
323-801-001-026K	6229969	VOLVO		TS woWC CG-IR



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
323-801-001-026N	6229969	VOLVO		TS woWC CG-IR
323-801-001-029N	06253949	DEUTZ/KHD		TS woWC CG-IR
323-801-001-040N	0446 1891	IVECO/MAGIRUS		TS woWC CG-IR
323-801-001-040N	0446 1891 ED 5049-64	IVECO/MAGIRUS		TS woWC CG-IR
323-801-001-054D	001 542 23 17	MERCEDES-BENZ		TS woWC CG-IR
323-801-003-001D	0240 5960 KZ 0144-51	IVECO/MAGIRUS		TS woWC CG-IR
323-801-003-001D	07148060	CLAAS		TS woWC CG-IR
323-801-003-001D	X830.030.050	AGCO/FENDT		TS woWC CG-IR
323-801-004-002N	0379943	DAF		TS woWC CG-IR
323-801-004-002N	0501 205 316	ZF		TS woWC CG-IR
323-801-004-002N	81.27421-0018	MAN		TS woWC CG-IR
323-801-004-003D	-	-		TS woWC CG-IR
323-801-004-006D	6229967	VOLVO		TS woWC CG-IR
323-801-004-007D	4960070	VOLVO		TS woWC CG-IR
323-801-004-012C	-	-		TS woWC CG-IR
323-801-004-017D	-	-		TS woWC CG-IR
323-801-004-039D	-	-		TS woWC CG-IR
323-801-004-039K	-	-		TS woWC CG-IR
323-801-005-001D	-	-		TS woWC CG-IR
323-801-005-005D	F182.900.020.040	AGCO/FENDT		TS woWC CG-IR
323-801-008-002D	-	-		TS (Sp) cockpit
323-801-009-001D	-	-		TS woWC CG-IR
323-801-009-003D	990 00 71 0055	MAN		TS woWC CG-IR
323-801-010-001D	-	-		TS woWC CG-IR
323-801-010-003K	11 65 2 230 283	BMW		TS woWC CG-IR
323-801-012-001D	1324624	VOLVO		TS woWC CG-IR
323-801-012-002D	431 919 521 A	VW-GROUP		TS woWC CG-IR
323-801-012-003D	-	-		TS woWC CG-IR
323-801-012-009	431 919 521 A	VW-GROUP	323-801-012-002D	TS woWC CG-IR
323-801-013-001D	4191 4925	IVECO/MAGIRUS		TS woWC CG-IR
323-801-017-001K	047 919 501 A	VW-GROUP		TS woWC CG-IR
323-801-017-001K	4191 4925	IVECO/MAGIRUS		TS woWC CG-IR
323-801-017-001N	047 919 501 A	VW-GROUP		TS woWC CG-IR
323-801-017-001N	4191 4925	IVECO/MAGIRUS		TS woWC CG-IR
323-801-017-002	047 919 501 A	VW-GROUP	323-801-017-001K	TS woWC CG-IR
323-801-017-002	047 919 501 A	VW-GROUP	323-801-017-001N	TS woWC CG-IR
323-801-018-001D	-	-		TS woWC CG-IR
323-801-020-002D	005 542 10 17	MERCEDES-BENZ		TS woWC CG-IR
323-801-028-001C	01177090	DEUTZ/KHD		TS (Sp) 2MS
323-801-028-001C	4208 0907	IVECO/MAGIRUS		TS (Sp) 2MS
323-801-028-001C	X830.030.059	AGCO/FENDT		TS (Sp) 2MS
323-801-028-001C	XXX OLK 440	IVECO/MAGIRUS		TS (Sp) 2MS
323-803-001-001D	001 542 84 17	MERCEDES-BENZ		TS wWC CG
323-803-001-001D	0672060	DAF		TS wWC CG
323-803-001-001D	12153674	DEUTZ/KHD		TS wWC CG
323-803-001-002D	-	-		TS wWC CG
323-803-001-004D	50.27421-0017	MAN		TS wWC CG
323-803-001-004D	8.743.505.000.0	EVOBUS		TS wWC CG
323-803-001-004D	V28620330	OPEL		TS wWC CG



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
323-803-001-006D	0248180	DAF		TS wWC CG
323-803-001-006D	250519	SCANIA		TS wWC CG
323-803-001-006D	614 09 0067	MAN		TS wWC CG
323-803-001-006D	8.743.413.000.0	EVOBUS		TS wWC CG
323-803-001-007D	-	-		TS wWC CG
323-803-001-008D	0501 309 568	ZF		TS wWC CG
323-803-001-009D	-	-		TS wWC CG
323-803-001-011D	-	-		TS wWC CG
323-803-001-012D	-	-		TS wWC CG
323-803-001-013D	008 542 10 17	MERCEDES-BENZ		TS wWC CG
323-803-001-013D	X830.030.085	AGCO/FENDT		TS wWC CG
323-803-001-016D	81.27421-0005	MAN		TS wWC CG
323-803-001-019D	8.743.720.000.0	EVOBUS		TS wWC CG
323-803-001-020D	X830.030.086.000	AGCO/FENDT		TS wWC CG
323-803-001-022D	0501 310 002	ZF		TS wWC CG
323-803-001-022D	62 16 1 360 870	BMW		TS wWC CG
323-803-001-023D	-	-		TS wWC CG
323-803-001-025D	06575670	CLAAS		TS wWC CG
323-803-001-026E	-	-		TS wWC CG
323-803-001-028D	-	-		TS wWC CG
323-803-001-030D	05859730	CLAAS		TS wWC CG
323-803-001-032D	AZ35440	JOHN DEERE		TS wWC CG
323-803-001-036D	-	-		TS wWC CG
323-803-001-059D	-	-		TS wWC CG
323-803-001-060D	-	-		TS wWC CG
323-803-001-062C	-	-		TS woWC CG-IR
323-803-001-064C	-	-		TS woWC CG-IR
323-803-002-002D	0126 2586 ED 8742-14	IVECO/MAGIRUS		TS wWC CG
323-803-002-002D	01262586	DEUTZ/KHD		TS wWC CG
323-803-002-002D	0501 313 475	ZF		TS wWC CG
323-803-002-002D	51.27420-0030	MAN		TS wWC CG
323-803-002-007D	0117 3672 EC 8942-14	IVECO/MAGIRUS		TS wWC CG
323-803-002-007D	01173672	DEUTZ/KHD		TS wWC CG
323-803-002-007D	4252 2650	IVECO/MAGIRUS		TS wWC CG
323-803-002-007D	82DB-10B921-AB	FORD		TS wWC CG
323-803-002-010C	348875	SCANIA		TS wWC CG
323-803-002-015D	-	-		TS wWC CG
323-803-002-016D	01179305	DEUTZ/KHD		TS wWC CG
323-803-002-017D	01179304	DEUTZ/KHD		TS wWC CG
323-803-002-019D	01180460	DEUTZ/KHD		TS wWC CG
323-803-002-020D	-	-		TS wWC CG
323-803-004-001D	002 542 73 17	MERCEDES-BENZ		TS wWC CG
323-803-004-001D	06578780	CLAAS		TS wWC CG
323-803-004-001D	51.27420-0008	MAN		TS wWC CG
323-803-004-002D	004 542 56 17	MERCEDES-BENZ		TS wWC CG
323-803-004-002D	06575680	CLAAS		TS wWC CG
323-803-004-003D	000 000 58 33	MERCEDES-BENZ		TS wWC CG
323-803-004-003D	51.27420-0015	MAN		TS wWC CG
323-803-004-003D	81.27420-0049	MAN		TS wWC CG



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
323-803-004-007D	007 542 09 17	MERCEDES-BENZ		TS wWC CG
323-803-004-011D	-			TS wWC CG
323-803-006-002C	0501 203 072	ZF		TS wWC CG
323-803-006-002C	0648634	DAF		TS wWC CG
323-803-006-002C	1136985	VOLVO		TS wWC CG
323-803-006-002C	81.27421-0019	MAN		TS wWC CG
323-803-014-002D	01178104	DEUTZ/KHD		TS wWC CG
323-803-014-002D	01179145	DEUTZ/KHD		TS wWC CG
323-803-014-007C	01180664	DEUTZ/KHD		TS wWC CG
323-804-004-010C	01177066	DEUTZ/KHD		TS (Sp) Bi
323-805-001-001K	002 542 75 17	MERCEDES-BENZ		TS woWC CG-IR
323-805-001-001K	01163722	DEUTZ/KHD		TS woWC CG-IR
323-805-001-001K	0248178	DAF		TS woWC CG-IR
323-805-001-001K	0481 6993	IRISBUS		TS woWC CG-IR
323-805-001-001K	195754	SCANIA		TS woWC CG-IR
323-805-001-001K	50.61344-1000	MAN		TS woWC CG-IR
323-805-001-001K	6.0568.50.9.0030	DEUTZ/KHD		TS woWC CG-IR
323-805-001-001N	002 542 75 17	MERCEDES-BENZ		TS woWC CG-IR
323-805-001-001N	01163722	DEUTZ/KHD		TS woWC CG-IR
323-805-001-001N	0248178	DAF		TS woWC CG-IR
323-805-001-001N	0481 6993	IRISBUS		TS woWC CG-IR
323-805-001-001N	0481 6993	IVECO/MAGIRUS		TS woWC CG-IR
323-805-001-001N	195754	SCANIA		TS woWC CG-IR
323-805-001-001N	50.61344-1000	MAN		TS woWC CG-IR
323-805-001-001N	6.0568.50.9.0030	DEUTZ/KHD		TS woWC CG-IR
323-805-001-002C	-	-		TS woWC CG-IR
323-805-001-004N	-	-		TS woWC CG-IR
323-805-001-005N	-	-		TS woWC CG-IR
323-805-001-015N	-	-		TS woWC CG-IR
323-805-003-001N	210603	SCANIA		TS woWC CG-IR
323-805-003-002N	-	-		TS woWC CG-IR
323-805-003-003N	-	-		TS woWC CG-IR
323-805-017-002C	-	-		TS woWC CG-IR
323-805-034-002B	-	-		TS woWC CG-IR
323-805-039-001C	04199522	DEUTZ/KHD		TS woWC CG-IR
323-805-039-001C	51.27420-0073	MAN		TS woWC CG-IR
323-805-039-001C	H312.900.020.010	AGCO/FENDT		TS woWC CG-IR
323-805-042-001C	04189605	DEUTZ/KHD		TS woWC CG-IR
323-809-010-005C	-	-		TS (Sp) LCD
323-809-019-003A	-	-		TS woWC CG-IR
325-805-003-001C	0685537	DAF		TS woWC CG-IR
325-805-003-003C	-	-		TS woWC CG-IR
340-214-013-001C	-	-		RPM/SS Hall
340-216-005-001C	-	-		RPM/SS AOscillator
340-216-005-002C	-	-		RPM/SS AOscillator
340-216-007-001A	8150500	VOLVO	340-216-010-003C	RPM/SS AOscillator
340-216-008-004Z	012 542 49 17	MERCEDES-BENZ		RPM/SS AOscillator
340-216-008-010Z	013 542 62 17	MERCEDES-BENZ		RPM/SS AOscillator
340-216-010-002Z	-	-		RPM/SS AOscillator



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
340-216-010-003C	8150500	VOLVO		RPM/SS AOscillator
340-216-010-004C	010 542 85 17	MERCEDES-BENZ		RPM/SS AOscillator
340-216-010-004C	0501 310 091	ZF		RPM/SS AOscillator
340-804-003-001	6041 315 007	ZF	340-804-005-007C	RPM/SS Inductiv
340-804-003-001	88.25909-6002	MAN	340-804-005-007C	RPM/SS Inductiv
340-804-005-001C	001 153 78 28	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-001C	4205 6669	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-001C	81.25909-0015	MAN		RPM/SS Inductiv
340-804-005-002C	002 542 26 17	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-002C	0103405	DAF		RPM/SS Inductiv
340-804-005-002C	340025	SCANIA		RPM/SS Inductiv
340-804-005-002C	4780941	VOLVO		RPM/SS Inductiv
340-804-005-002C	931870	IVECO/MAGIRUS		RPM/SS Inductiv
340-804-005-007C	264816	SCANIA		RPM/SS Inductiv
340-804-005-007C	4880804	VOLVO		RPM/SS Inductiv
340-804-005-007C	6041 315 007	ZF		RPM/SS Inductiv
340-804-005-007C	88.25909-6002	MAN		RPM/SS Inductiv
340-804-005-013A	006 542 69 17	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-013A	0501 309 245	ZF		RPM/SS Inductiv
340-804-005-015C	006 542 71 17	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-015C	0501 309 190	ZF		RPM/SS Inductiv
340-804-005-015C	11039662	VOLVO		RPM/SS Inductiv
340-804-005-018C	006 542 88 17	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-018C	0501 309 561	ZF		RPM/SS Inductiv
340-804-005-020C	008 542 18 17	MERCEDES-BENZ		RPM/SS Inductiv
340-804-005-020C	0501 311 517	ZF		RPM/SS Inductiv
340-804-005-028C	0501 313 968	ZF		RPM/SS Inductiv
340-804-006-007C	090126512	ZF		RPM/SS Inductiv
340-804-006-007C	81.27120-0050	MAN		RPM/SS Inductiv
340-804-007-001C	642572	SCANIA		RPM/SS Inductiv
340-804-007-001C	PRT 019726 010	OPEL		RPM/SS Inductiv
340-804-007-002A	-	-		RPM/SS Inductiv
340-804-007-003C	06262123	DEUTZ/KHD		RPM/SS Inductiv
340-804-007-004C	354671	VOLVO		RPM/SS Inductiv
340-804-007-011C	06768350	CLAAS		RPM/SS Inductiv
340-804-007-011G	06768350	CLAAS		RPM/SS Inductiv
340-804-007-013C	-	-		RPM/SS Inductiv
340-804-007-019C	00132300	CLAAS		RPM/SS Inductiv
340-804-007-019C	1557007100261	ZF		RPM/SS Inductiv
340-804-007-019C	385200230030	AGCO/FENDT		RPM/SS Inductiv
340-804-007-020C	192200230030	AGCO/FENDT		RPM/SS Inductiv
340-804-030-005B	-	-		RPM/SS Inductiv
340-804-032-001Z	96014422	OPEL		RPM/SS Inductiv
340-804-077-006Z	000 153 95 20	MERCEDES-BENZ		RPM/SS Inductiv
340-804-077-010Z	001 153 02 20	MERCEDES-BENZ		RPM/SS Inductiv
340-804-077-011Z	001 153 04 20	MERCEDES-BENZ		RPM/SS Inductiv
340-807-001-001C	001 542 26 17	MERCEDES-BENZ		RPM/SS Generator
340-807-001-001C	0336 0847 EE 0144-51	IVECO/MAGIRUS		RPM/SS Generator
340-807-001-001C	0336 0847 KZ 0144-51	IVECO/MAGIRUS		RPM/SS Generator



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
340-807-001-001C	1507899	VOLVO		RPM/SS Generator
340-807-001-001C	81.27121-0002	MAN		RPM/SS Generator
340-807-001-001C	991 12 71 0002	MAN		RPM/SS Generator
340-807-001-003C	-	-		RPM/SS Generator
340-808-001-001C	-	-		RPM/SS Generator
340-808-001-002C	01171283	DEUTZ/KHD		RPM/SS Generator
340-808-001-002C	6233384	VOLVO		RPM/SS Generator
340-808-001-002C	8.743.083.000.0	EVOBUS		RPM/SS Generator
340-808-001-002C	AZ12546	JOHN DEERE		RPM/SS Generator
340-808-001-002C	B8 5200 0654395	MERCEDES-BENZ		RPM/SS Generator
340-808-001-002G	01171283	DEUTZ/KHD		RPM/SS Generator
340-808-001-002G	6233384	VOLVO		RPM/SS Generator
340-808-001-002G	AZ12546	JOHN DEERE		RPM/SS Generator
340-808-001-002G	B8 5200 0654395	MERCEDES-BENZ		RPM/SS Generator
340-808-001-004G	-	-		RPM/SS Generator
340-811-001-003B	06040150	CLAAS		RPM/SS FGenerator
340-811-001-003B	81.27121-0003	MAN		RPM/SS FGenerator
360-081-029-001C	001 542 21 17	MERCEDES-BENZ		PS woWC CG
360-081-029-001C	0231127	DAF		PS woWC CG
360-081-029-001K	001 542 21 17	MERCEDES-BENZ		PS woWC CG
360-081-029-001K	0231127	DAF		PS woWC CG
360-081-029-004C	-	-		PS woWC CG
360-081-029-008C	-	-		PS woWC CG
360-081-029-010C	0162112	DAF		PS woWC CG
360-081-029-010C	026 542 02 17	MERCEDES-BENZ		PS woWC CG
360-081-029-010C	12153470	DEUTZ/KHD		PS woWC CG
360-081-029-010K	0162112	DAF		PS woWC CG
360-081-029-010K	026 542 02 17	MERCEDES-BENZ		PS woWC CG
360-081-029-010K	12153470	DEUTZ/KHD		PS woWC CG
360-081-029-012C	0524290	DAF		PS woWC CG
360-081-029-012C	2178744/0	STEYR		PS woWC CG
360-081-029-012C	283591	VOLVO		PS woWC CG
360-081-029-012K	0524290	DAF		PS woWC CG
360-081-029-012K	2178744/0	STEYR		PS woWC CG
360-081-029-012K	283591	VOLVO		PS woWC CG
360-081-029-013C	-	-		PS woWC CG
360-081-029-013K	-	-		PS woWC CG
360-081-029-020C	-	-		PS woWC CG
360-081-029-025C	001 542 82 17	MERCEDES-BENZ		PS woWC CG
360-081-029-025K	001 542 82 17	MERCEDES-BENZ		PS woWC CG
360-081-029-026C	1140043	DAF		PS woWC CG
360-081-029-026K	1140043	DAF		PS woWC CG
360-081-029-033C	X820.080.050	AGCO/FENDT		PS woWC CG
360-081-029-038C	0446 1892 ED 5049-64	IVECO/MAGIRUS		PS woWC CG
360-081-029-038C	253527	SCANIA		PS woWC CG
360-081-029-041C	4780583	VOLVO		PS woWC CG
360-081-029-042C	4780747	VOLVO		PS woWC CG
360-081-029-059C	004 542 43 17	MERCEDES-BENZ		PS woWC CG
360-081-029-062C	-	-		PS woWC CG



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
360-081-029-065C	004 542 89 17	MERCEDES-BENZ		PS woWC CG
360-081-029-085C	006 542 32 17	MERCEDES-BENZ		PS woWC CG
360-081-029-085C	614 09 0105	MAN		PS woWC CG
360-081-029-086	-	VOITH	360-081-029-087C	PS woWC CG
360-081-029-087C	-	VOITH		PS woWC CG
360-081-029-087C	005 542 18 17	MERCEDES-BENZ		PS woWC CG
360-081-030-001C	-	-		PS wWC CG
360-081-030-001K	-	MAN		PS wWC CG
360-081-030-002C	-	-		PS wWC CG
360-081-030-002K	-	-		PS wWC CG
360-081-030-004C	-	-		PS wWC CG
360-081-030-006C	-	-		PS wWC CG
360-081-030-008C	0337 0879 EE 0154-51	IVECO/MAGIRUS		PS wWC CG
360-081-030-008C	614 09 0068	MAN		PS wWC CG
360-081-030-009C	09946645	DEUTZ/KHD		PS wWC CG
360-081-030-009C	2 230 281	BMW		PS wWC CG
360-081-030-009C	T11 919 081	VW-GROUP		PS wWC CG
360-081-030-009K	09946645	DEUTZ/KHD		PS wWC CG
360-081-030-009K	2 230 281	BMW		PS wWC CG
360-081-030-009K	T11 919 081	VW-GROUP		PS wWC CG
360-081-030-010C	-	-		PS wWC CG
360-081-030-014C	-	-		PS wWC CG
360-081-030-015C	-	-		PS wWC CG
360-081-030-017C	1268667	DAF		PS wWC CG
360-081-030-017C	50.27421-0051	MAN		PS wWC CG
360-081-030-017C	7131930051	STEYR		PS wWC CG
360-081-030-018C	-	-		PS wWC CG
360-081-030-019C	-	-		PS wWC CG
360-081-030-020C	-	-		PS wWC CG
360-081-030-022C	-	-		PS wWC CG
360-081-030-023C	-	-		PS wWC CG
360-081-030-025C	02406368	DEUTZ/KHD		PS wWC CG
360-081-030-028C	-	-		PS wWC CG
360-081-030-028K	-	-		PS wWC CG
360-081-030-030C	-	-		PS wWC CG
360-081-030-031C	90.81616-1788	MAN		PS wWC CG
360-081-030-032C	-	-		PS wWC CG
360-081-030-032K	-	-		PS wWC CG
360-081-030-033C	-	-		PS wWC CG
360-081-030-036C	003 542 55 17	MERCEDES-BENZ		PS wWC CG
360-081-030-036K	003 542 55 17	MERCEDES-BENZ		PS wWC CG
360-081-030-037C	01162743	DEUTZ/KHD		PS wWC CG
360-081-030-039C	-	-		PS wWC CG
360-081-030-041C	-	-		PS wWC CG
360-081-030-049C	-	-		PS wWC CG
360-081-030-049K	-	-		PS wWC CG
360-081-030-052C	366906	VOLVO		PS wWC CG
360-081-030-052C	8.743.719.000.0	EVOBUS		PS wWC CG
360-081-030-053C	81.27421-0091	MAN		PS wWC CG



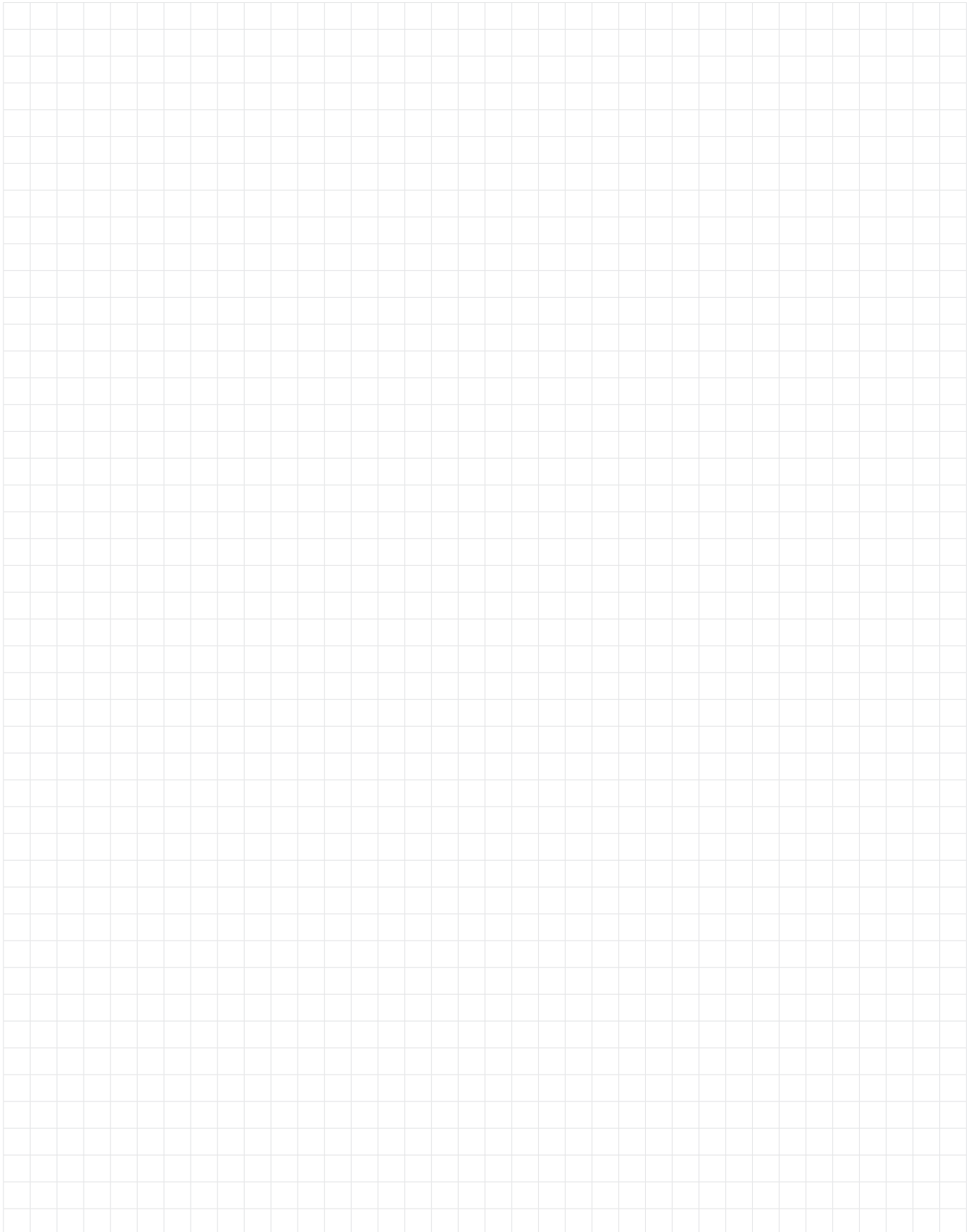
Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
360-081-030-063C	275750	SCANIA		PS wWC CG
360-081-030-065K	-	-		PS wWC CG
360-081-030-070C	01137306	DEUTZ/KHD		PS wWC CG
360-081-030-070C	88.27421-6008	MAN		PS wWC CG
360-081-030-071C	1252558	OPEL		PS wWC CG
360-081-030-071C	90040918	OPEL		PS wWC CG
360-081-030-074C	8.743.521.000.0	EVOBUS		PS wWC CG
360-081-030-075C	285905	SCANIA		PS wWC CG
360-081-030-078C	6228489	VOLVO		PS wWC CG
360-081-030-086C	1323797	VOLVO		PS wWC CG
360-081-030-097C	-	-		PS wWC CG
360-081-030-100C	-	-		PS wWC CG
360-081-030-107C	692 00 71 0001	STEYR		PS wWC CG
360-081-030-112C	787400	IVECO/MAGIRUS		PS wWC CG
360-081-030-119C	-	-		PS wWC CG
360-081-030-122C	-	-		PS wWC CG
360-081-030-138C	-	-		PS wWC CG
360-081-030-152C	-	-		PS wWC CG
360-081-030-157C	928 606 203 01	PORSCHE		PS wWC CG
360-081-032-001C	149653	SCANIA		PS woWC IR
360-081-032-002C	0236776	DAF		PS woWC IR
360-081-032-003C	0162113	DAF		PS woWC IR
360-081-032-003C	026 542 01 17	MERCEDES-BENZ		PS woWC IR
360-081-032-003C	12153471	DEUTZ/KHD		PS woWC IR
360-081-032-003C	154619	SCANIA		PS woWC IR
360-081-032-003C	2 230 282	BMW		PS woWC IR
360-081-032-003C	50.76034-0007	MAN		PS woWC IR
360-081-032-004C	-	-		PS woWC CG
360-081-032-006C	-	-		PS woWC IR
360-081-032-007C	-	-		PS woWC IR
360-081-032-008C	01163720	DEUTZ/KHD		PS woWC IR
360-081-032-008C	88.27421-6010	MAN		PS woWC IR
360-081-032-011C	09974211	DEUTZ/KHD		PS woWC IR
360-081-032-011C	82.27421-0019	MAN		PS woWC IR
360-081-032-013C	-	-		PS woWC IR
360-081-032-014C	-	-		PS woWC IR
360-081-032-016C	-	-		PS woWC IR
360-081-032-025C	-	-		PS woWC IR
360-081-032-052C	-	-		PS woWC IR
360-081-032-053C	-	-		PS woWC IR
360-081-032-059C	51.27421-0099	MAN		PS woWC IR
360-081-032-059C	H816.970.020.010	AGCO/FENDT		PS woWC IR
360-081-032-060C	012 542 05 17	MERCEDES-BENZ		PS woWC IR
360-081-032-060C	04199523	DEUTZ/KHD		PS woWC IR
360-081-032-060C	H312.970.020.020	AGCO/FENDT		PS woWC IR
360-081-034-002C	001 542 56 17	MERCEDES-BENZ		PS wWC CG
360-081-034-004C	002 542 17 17	MERCEDES-BENZ		PS wWC CG
360-081-034-004C	8.743.590.000.0	EVOBUS		PS wWC CG
360-081-037-003C	-	-		PS woWC CG



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
360-081-037-006C	-	-		PS woWC CG
360-081-037-007C	4786127	VOLVO		PS woWC CG
360-081-037-008C	-	-		
360-081-037-010C		VOLVO		PS woWC CG
360-081-037-011C	-	-		PS woWC CG
360-081-037-013C	-	-		PS woWC CG
360-081-037-017C	11039149	VOLVO		PS woWC CG
360-081-037-018C	-	-		PS woWC CG
360-081-037-019C	-	-		PS woWC CG
360-081-038-001C	51.27421-0094	MAN		PS woWC IR
360-081-038-002C	50.27421-0082	MAN		PS woWC IR
360-081-038-003C	50.27421-0049	MAN		PS woWC IR
360-081-038-005C	-	-		PS woWC IR
360-081-038-008C	-	-		PS woWC CG
360-081-038-014C	H816.900.020.020	AGCO/FENDT		PS woWC IR
360-081-039-002C	-	-		PS wWC IR
360-081-039-003C	-	-		PS wWC IR
360-081-039-004C	-	-		PS wWC IR
360-081-039-007C	345867	SCANIA		PS wWC IR
360-081-039-015C	-	-		PS wWC IR
360-081-051-012C	-	VOLVO		PS woWC IR
360-081-051-013C	-	VOLVO		PS woWC IR
360-081-052-003C	006 542 94 17	MERCEDES-BENZ		PS woWC CG
360-081-053-001C	-	-		PS wWC CG
360-081-053-003C	01179026	DEUTZ/KHD		PS wWC CG
360-081-053-003C	357 00 71 0011	MAN		PS wWC CG
360-081-053-004C	-	-		PS wWC CG
360-081-054-002Z	866 839	VOLVO		PS woWC IR
360-081-061-002C	374338	SCANIA		PS wWC CG
360-081-061-003C	373811	SCANIA		PS wWC CG
360-081-061-006C	397946	SCANIA		PS wWC CG
360-081-062-002A	04190809	DEUTZ/KHD		PS wWC CG
360-081-062-003C	01179918	DEUTZ/KHD		PS wWC CG
360-081-062-004A	04189466	DEUTZ/KHD		PS wWC CG
360-081-062-005A	01181115KZ	DEUTZ/KHD		PS wWC CG
360-081-063-001C	81.27421-0097	MAN		PS wWC IR
360-081-063-003C	7.314.084.000.0	EVOBUS		PS wWC IR
360-081-064-001C	81.27421-0098	MAN		PS wWC IR
360-081-064-003C	81.27421-0109	MAN		PS wWC CG
360-081-064-004C	7.314.085.000.0	EVOBUS		PS wWC IR
362-081-001-001K	-	-		PS woWC CG
362-081-002-003C	-	-		PS woWC CG
362-081-002-004C	-	-		PS woWC CG
362-081-003-001C	000 542 14 25	MERCEDES-BENZ		PS woWC CG
89-356-017	000 997 51 49	MERCEDES-BENZ		Accessory
89-356-017	0267899	DAF		Accessory
89-356-017	04389616	DEUTZ/KHD		Accessory
89-356-017	06260431	DEUTZ/KHD		Accessory
89-356-017	06729960	CLAAS		Accessory



Article No.	OE No.	Manufacturer	Article No. (new)	Name of Article
89-356-017	0819 7899	IVECO/MAGIRUS		Accessory
89-356-017	5000295954	RENAULT		Accessory
89-356-017	81.27901-0012	MAN		Accessory
89-356-017	L33601	JOHN DEERE		Accessory
89-356-017	X810.150.020.010	AGCO/FENDT		Accessory
X10-224-009-021	-	-		TTS 80 woWC CG-IR
X10-224-009-029	-	-		TTS 80 woWC CG-IR
X10-224-009-037	-	-		TTS 80 woWC CG-IR
X10-224-009-040	-	-		TTS 80 woWC CG-IR
X10-224-009-048	81.27421-0020	MAN		TTS 80 woWC CG-IR
X10-224-009-072	-	-		TTS 80 woWC CG-IR
X10-224-014-002	-	-		TTS 80 woWC CG-IR
X10-224-014-003	-	-		TTS 80 woWC CG-IR
X10-224-014-011	-	-		TTS 80 woWC CG-IR
X10-224-014-015	-	-		TTS 80 woWC CG-IR
X10-224-014-023	4742576	VOLVO		TTS 80 woWC CG-IR
X10-224-014-030	-	-		TTS 80 woWC CG-IR
X10-224-014-031	-	-		TTS 80 woWC CG-IR
X10-224-014-036	-	-		TTS 80 woWC CG-IR
X10-224-014-044	-	-		TTS 80 woWC CG-IR
X10-224-021-001	-	-		TTS 80 woWC CG-IR
X10-224-021-004	-	-		TTS 80 woWC CG-IR
X10-224-021-005	-	-		TTS 80 woWC CG-IR
X10-224-021-006	-	-		TTS 80 woWC CG-IR
X10-232-001-001	0501 310 016	ZF		TSw -B- IR
X10-232-001-002	-	-		TSw -B- IR
X10-232-001-003	-	-		TSw -B- IR
X10-232-001-004	-	-		TSw -B- IR
X10-232-001-005	-	-		TSw -B- IR
X10-232-001-006	-	-		TSw -B- IR
X10-232-001-007	-	-		TSw -B- IR
X10-232-001-008	-	-		TSw -B- IR
X10-232-001-009	-	-		TSw -B- IR
X10-232-001-010	-	-		TSw -B- IR
X10-340-006-001	-	-		RPM/SS Hall
X11-221-001-002	-	-		Accessory
X11-221-001-003	-	-		Accessory
X11-221-001-004	-	-		Accessory





Sensors	Abbreviation	Page
Pressure Senders – Without Warning Contact, Common Ground	PS woWC CG	12
Pressure Senders – With Warning Contact, Common Ground	PS wWC CG	14
Pressure Senders – Without Warning Contact, Insulated Return	PS woWC IR	18
Pressure Senders – With Warning Contact, Insulated Return	PS wWC IR	20
Pressure Switches – Common Ground or Insulated Return	PSw CG-IR	26
Temperature Senders – Without Warning Contact, Common Ground or Insulated Return	TS woWC CG-IR	30
Temperature Senders – With Warning Contact, Common Ground	TS wWC CG	34
Temperature Senders (special) – With 2 Measuring Points	TS (Sp) 2MS	36
Temperature Senders (special) – For Bimetal Indicating Instruments	TS (Sp) Bi	38
Temperature Senders (special) – Air (VDO cockpit vision/VDO cockpit international)	TS (Sp) cockpit	40
Temperature Senders (special) – Air (VDO LCD cockpit)	TS (Sp) LCD	42
Temperature Switches – Type A, Common Ground	TSw-A-CG	48
Temperature Switches – Type B, Insulated Return	TSw-B-IR	52
RPM and Speed Senders – Blocking-Oscillator Senders	RPM/SS BOscillator	56
RPM and Speed Senders – Frequency-Generator Senders	RPM/SS FGenerator	58
RPM and Speed Senders – Generator-Type Senders	RPM/SS Generator	60
RPM and Speed Senders – Hall-Effect Senders	RPM/SS Hall	62
RPM and Speed Senders – Inductive Senders	RPM/SS Inductive	64
Lever-Type Senders – Without Warning Contact, Insulated Return	LTS woWC IR	68
Lever-Type Senders – Without Warning Contact, Insulated Return (adjustable)	LTS (Ver) woWC IR	72
Lever-Type Senders – Without Warning Contact, Common Ground or Insulated Return (special)	LTS (Sp) woWC CG-IR	74
Tubular-Type Senders – Without Warning Contact, Common Ground or Insulated Return (ø 54 mm)	TTS 54 woWC CG-IR	80
Tubular-Type Senders – Without Warning Contact, Common Ground or Insulated Return (ø 80 mm)	TTS 80 woWC CG-IR	84
Tubular-Type Senders – With Warning Contact, Common Ground or Insulated Return (ø 54 mm)	TTS 54 wWC CG-IR	88
Tubular-Type Senders – Without Warning Contact, Common Ground or Insulated Return (special)	TTS (Sp) woWC CG-IR	92



	Type of connection		Measuring range [bar]
	Form		Measuring range [° C]
	Special feature		Warning contact/Switch point [bar]
	Diameter		Warning contact/Switch point [° C]
	See note "Lx" on the data sheet (x = 1, 2, 3, ...)		Make point/Break point
	Switch point		Resistor at [° C]
	Vented/Unvented		Operation voltage [V]
	Lever arm radius without float		Operating temperature [° C]
	Travel (empty-full)		Maximum operating temperature [° C]
	Sheet metal thickness		Pulses per revolution
	Measuring point I		Maximum revolutions [min ⁻¹]
	Measuring point II		Bolt circle diameter of flange [mm]
	Delayed action at -20° C and 9 V [sec]		Installation depth L
	Delayed action at -20° C and 10 V [sec]		Resistor "full" [Ω]
	Thread		Resistor "empty" [Ω]
	Maximum tightening torque for a sender		Manufacturers
	Sensor connector		

Catalogues

- Actuators for Central Locking Systems
- Engine Actuators
- HVAC Blower and Fan Systems
- Screen Headlight Washer Systems
- Sensors Engine Management
- Fuel Systems
- Oxygen Sensors

Online Catalog

- VDO Webcatalog on www.vdo.com



Continental is a certified
TecDoc partner.



Continental Trading GmbH

Sodener Strasse 9

65824 Schwalbach

Germany

Tel: +49 6196 87-0

Fax: +49 6196 86571

www.vdo.com

E-Mail: replacementparts@vdo.com

VDO – A Trademark of the Continental Corporation

The information provided in this brochure contains only general descriptions or performance characteristics, which do not always apply as described in case of actual use or which may change as a result of further development of the products. This information is merely a technical description of the product. This information is not meant or intended to be a special guarantee for a particular quality or a particular durability. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. We reserve the right to make changes in availability as well as technical changes without prior notice.

A2C59507320 | Continental Trading GmbH © 2014
Printed in Germany

Please note:

Application – The products described in this catalogue are designed for use in land vehicles, engines and equipment.

Disclaimer – The data in this replacement parts catalogue has been compiled and processed for the purpose of presenting our replacement parts range and is correct to the best of our knowledge. Subject to technical alterations, errors and omissions.

Availability is not guaranteed. We cannot be held liable with regard to any information contained in the Continental Trading replacement parts catalogue except in case of intent, gross negligence or where mandatory liability is borne in accordance with German product liability law.