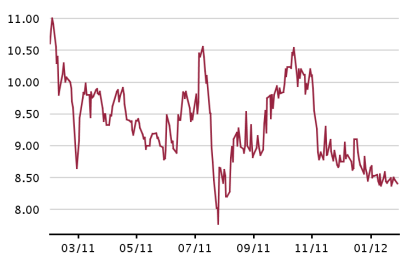


**Buy** (old: Buy)

**PT EUR 11.50** (old: 11.50)

**Price** EUR 8.41  
**Bloomberg** SIS GR  
**Reuters** SISG  
**Sector** Technology

**First Sensor develops and produces sensor solutions along the entire value chain: from sensor chips up to the entire system for many areas of application.**



Share data: 13.02.2012 / Closing price

**Market cap:** EUR 82.7 m  
**Enterprise Value (EV):** EUR 103 m  
**Book value:** EUR 64.2 m  
**No. of shares:** 9.8 m  
**Trading volume Ø:** EUR 104 th

**Shareholders:**

Free Float 53.8 %  
 Alegria 27.3 %  
 Beteiligungsgesellschaft Daniel Hopp 18.9 %

**Calendar:**

Figures 2011 03/29/12  
 Figures Q1 05/30/12  
 AGM 06/14/12  
 Figures Q2 08/30/12

Change	2011E		2012E		2013E	
	old	Δ%	old	Δ%	old	Δ%
<b>Sales</b>	68.1	-4.5	115	0	130	0
<b>EBIT</b>	5.6	-39.5	12.2	0	15.3	0.0
<b>EPS</b>	0.41	-53.7	0.78	0	1.00	0

Analysis: Warburg Research  
 Date of publication: 14.02.2012  
 Analyst:  
 Andreas Wolf +49 (0)40-309537-140  
 awolf@warburg-research.com

## Non-recurring expenses burden in Q4 / Solid outlook 2012

First Sensor has published preliminary figures for FY 2011.

**First Sensor - Q4 2011**

Figures in EUR m	Q4/11	Q4/11e	Q4/10	yoy	2011	2010	yoy
<b>Sales</b>	24.3	27.3	12.9	87.6%	65.0	45.2	43.7%

Source: First Sensor (historical data), Warburg Research (estimates)

The Sensortech group which was recently acquired from Augusta Technologie has been consolidated since October 2011 and should have contributed ca. EUR 14m to sales. With that organic sales growth of First Sensor should have been ca. 3% in Q4 (estimates Warburg Research). The deviation from the estimates coincides with a weaker economy in Q4.

**Non-recurring expenses burden:** the company expects **EBITA** 2011 to amount to **EUR 5.5m** adjusted by non-recurring expenses. Non-recurring expenses particularly include transaction costs in relation to the acquisition of the Sensortech group und relocation of the production plant of the subsidiary First Sensor Technology GmbH into the main plant in Berlin Oberschönweide. With it the operating result came in below expectations (WRe: EUR 6.2m).

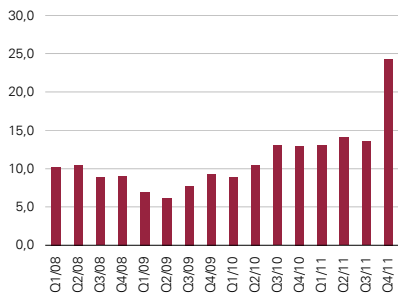
**Guidance confirms estimates overall:** besides the main figures 2011 First Sensor has published an outlook for 2012. The company expects sales of EUR 118-122m as well as an **EBITA** of EUR 13-15m. While the sales guidance comes in slightly above our estimates, our expected **EBITA** of EUR 14.7m lies within First Sensor's target. Estimates 2012ff. remain unchanged.

Shortly after publishing figures the company also announced that Dr. Ingo Stein would retire from the Executive Board at the end of the current quarter for personal reasons. He will be replaced by Joachim Wimmer who most recently worked as the general manager of an international manufacturer of electronic products with annual sales of ca. EUR 100m and 750 employees.

**In view of an upside of ca. 25% to the DCF-based PT of EUR 11.50 the rating remains Buy.**

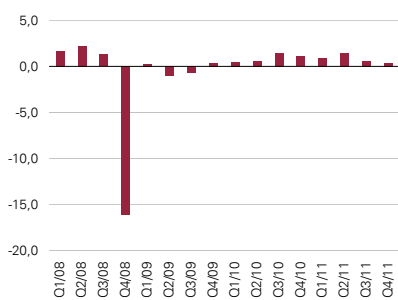
Fiscal year ending: 31.12. in EUR m	2007	2008	2009	2010	2011E	2012E	2013E
<b>Sales</b>	37.0	38.5	30.2	45.2	65.0	115	130
<i>Change Sales yoy</i>	13.4 %	3.9 %	-21.5 %	49.7 %	43.7 %	76.9 %	13.0 %
<b>Gross profit</b>	26.2	27.2	18.3	27.7	38.8	66.8	76.3
<i>Gross margin</i>	70.9 %	70.6 %	60.4 %	61.3 %	59.7 %	58.1 %	58.7 %
<b>EBITDA</b>	9.1	6.7	2.1	7.0	8.0	19.6	24.1
<i>EBITDA-margin</i>	24.5 %	17.5 %	6.8 %	15.5 %	12.4 %	17.0 %	18.5 %
<b>EBIT</b>	6.2	-10.9	-1.1	3.6	3.4	12.2	15.3
<i>EBIT-margin</i>	16.8 %	-28.5 %	-3.7 %	8.0 %	5.2 %	10.6 %	11.7 %
<b>Net income</b>	3.8	-11.3	-1.7	2.2	1.4	7.7	9.8
<b>EPS</b>	1.03	-2.90	-0.36	0.34	0.19	0.78	1.00
<b>Free Cash Flow per share</b>	-0.69	-3.60	-0.30	0.35	0.54	0.53	0.81
<b>Dividend</b>	0.10	0.10	0.00	0.00	0.00	0.00	0.10
<i>Dividend Yield</i>	1.2 %	1.2 %	n.a.	n.a.	n.a.	n.a.	1.2 %
<b>EV/Sales</b>	2.2	2.1	2.7	1.8	1.6	0.9	0.8
<b>EV/EBITDA</b>	9.0	12.1	39.6	11.6	12.8	5.2	4.1
<b>EV/EBIT</b>	13.1	n.m.	n.m.	22.6	30.3	8.4	6.5
<b>PER</b>	8.2	n.m.	n.m.	24.7	44.2	10.8	8.4
<b>ROCE</b>	15.8 %	-26.1 %	-2.5 %	7.2 %	4.1 %	10.6 %	13.0 %
<b>Adj. Free Cash Flow Yield</b>	6.6 %	3.8 %	0.1 %	4.0 %	4.7 %	14.6 %	18.2 %

**Sales development**  
in EUR m



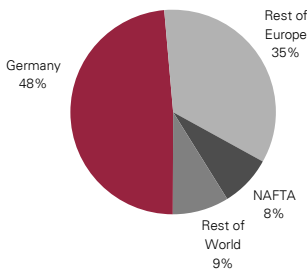
Source: First Sensor

**EBIT development**  
in EUR m



Source: First Sensor

**Sales by regions**  
2010



Source: First Sensor

**Company background**

First Sensor develops customer-specific sensor solutions. The value creation covers the entire value chain from sensor component (chip) up to a complete system. The products are manufactured in small to large-sized series. First Sensor is taking a worldwide leading position in tailor-made solutions.

The sensors (e.g. optical sensors, pressure and flow sensors, target angle and position sensors) and sensor systems developed and produced by First Sensor are necessary for the operation of various end products and, therefore, represent an integral part of them. The verticals addressed by the company are life science, industrial applications, mobility, security as well as aerospace.

**Competitive quality**

Sensors and sensor solutions developed and produced by First Sensor for specific problems enable customers to open up application fields, which would not be covered by standard sensors made by mass producers, enabling First Sensor's customer to differentiate from others. On top of this, the costs for the sensors only represent a small fraction of the costs of the customer's end product which strengthens First Sensor's negotiating position.

Their excellent competitive position is strongly defensible as...

...large sensor manufacturers focus on standard products and differentiate via economies of scale. Thus, the market niches addressed by First Sensor are usually not big enough for the large players.

...much smaller players in the strongly fragmented sensor market do not have access to the attractive markets and customers.

This is the result of the interaction between many different factors such as...

...the product manufacturers' high dependency on sensor suppliers which leads to high demand with respect to the supplier's solid financial situation.

...the know how in sensor technology, which has been gained over many years and is maintained by considerable expenses for R&D (approx. 10% of sales p.a).

...the CAPEX requirements that cannot be denied as well as...

...the ability to organise production processes efficiently and last but not least...

...the continuously growing relations with key players of important industries.

All of this not only represents important pillars of the high competitive quality but also barriers to market entry for potential competitors.

<b>Consolidated Profit &amp; Loss First Sensor</b>							
in EUR m							
	2007	2008	2009	2010	2011E	2012E	2013E
<b>Sales</b>	<b>37.0</b>	<b>38.5</b>	<b>30.2</b>	<b>45.2</b>	<b>65.0</b>	<b>115</b>	<b>130</b>
Increase / decrease in inventory	1.3	1.3	-0.5	0.8	0.7	-0.5	0.7
Own work capitalised	0.0	0.1	0.0	0.8	2.0	0.5	0.5
<b>Total sales</b>	<b>38.3</b>	<b>39.8</b>	<b>29.7</b>	<b>46.7</b>	<b>67.7</b>	<b>115</b>	<b>131</b>
Material Expenses	12.1	12.7	11.5	19.0	28.9	48.2	54.9
<b>Gross profit</b>	<b>26.2</b>	<b>27.2</b>	<b>18.3</b>	<b>27.7</b>	<b>38.8</b>	<b>66.8</b>	<b>76.3</b>
Personnel expenses	13.8	14.7	11.9	15.3	18.8	31.3	33.5
Other operating income	2.0	1.5	2.0	1.7	1.8	1.7	1.8
Other operating expenses	5.4	7.3	6.3	7.1	13.7	17.6	20.5
Unfrequent items	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>EBITDA</b>	<b>9.1</b>	<b>6.7</b>	<b>2.1</b>	<b>7.0</b>	<b>8.0</b>	<b>19.6</b>	<b>24.1</b>
Depreciation of fixed assets	2.5	3.0	3.1	3.3	4.1	4.9	5.2
<b>EBITA</b>	<b>6.5</b>	<b>3.7</b>	<b>-1.0</b>	<b>3.7</b>	<b>4.0</b>	<b>14.7</b>	<b>18.9</b>
Amortisation of intangible fixed assets	0.3	5.4	0.1	0.1	0.6	2.5	3.6
Impairment charges and amortisation of goodwill	0.0	9.3	0.0	0.0	0.0	0.0	0.0
<b>EBIT</b>	<b>6.2</b>	<b>-10.9</b>	<b>-1.1</b>	<b>3.6</b>	<b>3.4</b>	<b>12.2</b>	<b>15.3</b>
Interest income	0.2	0.4	0.1	0.1	0.1	0.1	0.1
Interest expenses	0.6	1.0	0.9	0.8	1.8	1.8	1.7
Financial result	-0.5	-0.6	-0.8	-0.6	-1.6	-1.2	-1.1
<b>Recurring pretax income from cont. operations</b>	<b>5.7</b>	<b>-11.5</b>	<b>-1.9</b>	<b>3.0</b>	<b>1.8</b>	<b>11.0</b>	<b>14.2</b>
Extraordinary income/loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBT</b>	<b>5.7</b>	<b>-11.5</b>	<b>-1.9</b>	<b>3.0</b>	<b>1.8</b>	<b>11.0</b>	<b>14.2</b>
Taxes total	1.9	-0.3	-0.3	0.7	0.4	3.4	4.3
<b>Net income from continuing operations</b>	<b>3.9</b>	<b>-11.3</b>	<b>-1.7</b>	<b>2.3</b>	<b>1.4</b>	<b>7.7</b>	<b>9.8</b>
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income before minorities</b>	<b>3.9</b>	<b>-11.3</b>	<b>-1.7</b>	<b>2.3</b>	<b>1.4</b>	<b>7.7</b>	<b>9.8</b>
Minority interest	0.0	0.0	0.0	0.1	0.0	0.0	0.0
<b>Net income</b>	<b>3.8</b>	<b>-11.3</b>	<b>-1.7</b>	<b>2.2</b>	<b>1.4</b>	<b>7.7</b>	<b>9.8</b>

Sources: First Sensor (historical data), Warburg Research (forecasts)

<b>Consolidated Profit &amp; Loss First Sensor</b>							
in % of Sales							
	2007	2008	2009	2010	2011E	2012E	2013E
<b>Sales</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
Increase / decrease in inventory	3.4 %	3.3 %	-1.7 %	1.7 %	1.1 %	-0.4 %	0.5 %
Own work capitalised	0.1 %	0.2 %	0.1 %	1.7 %	3.1 %	0.4 %	0.4 %
<b>Total sales</b>	<b>103.5 %</b>	<b>103.5 %</b>	<b>98.4 %</b>	<b>103.4 %</b>	<b>104.2 %</b>	<b>100.0 %</b>	<b>100.9 %</b>
Material Expenses	32.6 %	32.9 %	37.9 %	42.0 %	44.5 %	41.9 %	42.2 %
<b>Gross profit</b>	<b>70.9 %</b>	<b>70.6 %</b>	<b>60.4 %</b>	<b>61.4 %</b>	<b>59.7 %</b>	<b>58.1 %</b>	<b>58.7 %</b>
Personnel expenses	37.2 %	38.2 %	39.3 %	33.9 %	29.0 %	27.2 %	25.8 %
Other operating income	5.5 %	4.0 %	6.5 %	3.8 %	2.8 %	1.5 %	1.4 %
Other operating expenses	14.7 %	18.9 %	20.8 %	15.8 %	21.1 %	15.3 %	15.8 %
Unfrequent items	<b>0.0 %</b>	<b>0.0 %</b>	<b>0.0 %</b>	<b>0.0 %</b>	<b>0.0 %</b>	<b>0.0 %</b>	<b>0.0 %</b>
<b>EBITDA</b>	<b>24.5 %</b>	<b>17.5 %</b>	<b>6.8 %</b>	<b>15.5 %</b>	<b>12.4 %</b>	<b>17.0 %</b>	<b>18.5 %</b>
Depreciation of fixed assets	6.8 %	7.8 %	10.2 %	7.3 %	6.3 %	4.3 %	4.0 %
<b>EBITA</b>	<b>17.7 %</b>	<b>9.7 %</b>	<b>-3.4 %</b>	<b>8.2 %</b>	<b>6.1 %</b>	<b>12.8 %</b>	<b>14.5 %</b>
Amortisation of intangible fixed assets	0.9 %	14.0 %	0.3 %	0.2 %	0.9 %	2.2 %	2.8 %
Impairment charges and amortisation of goodwill	0.0 %	24.2 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>EBIT</b>	<b>16.8 %</b>	<b>-28.5 %</b>	<b>-3.7 %</b>	<b>8.0 %</b>	<b>5.2 %</b>	<b>10.6 %</b>	<b>11.7 %</b>
Interest income	0.6 %	1.0 %	0.2 %	0.3 %	0.2 %	0.1 %	0.1 %
Interest expenses	1.7 %	2.7 %	2.8 %	1.9 %	2.7 %	1.5 %	1.3 %
Financial result	-1.3 %	-1.6 %	-2.8 %	-1.4 %	-2.4 %	-1.0 %	-0.9 %
<b>Recurring pretax income from cont. operations</b>	<b>15.5 %</b>	<b>-30.0 %</b>	<b>-6.4 %</b>	<b>6.6 %</b>	<b>2.8 %</b>	<b>9.6 %</b>	<b>10.9 %</b>
Extraordinary income/loss	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>EBT</b>	<b>15.5 %</b>	<b>-30.0 %</b>	<b>-6.4 %</b>	<b>6.6 %</b>	<b>2.8 %</b>	<b>9.6 %</b>	<b>10.9 %</b>
Taxes total	5.0 %	-0.7 %	-0.9 %	1.5 %	0.7 %	2.9 %	3.3 %
<b>Net income from continuing operations</b>	<b>10.5 %</b>	<b>-29.3 %</b>	<b>-5.5 %</b>	<b>5.1 %</b>	<b>2.1 %</b>	<b>6.7 %</b>	<b>7.6 %</b>
Income from discontinued operations (net of tax)	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>Net income before minorities</b>	<b>10.5 %</b>	<b>-29.3 %</b>	<b>-5.5 %</b>	<b>5.1 %</b>	<b>2.1 %</b>	<b>6.7 %</b>	<b>7.6 %</b>
Minority interest	0.1 %	0.0 %	0.0 %	0.2 %	0.0 %	0.0 %	0.0 %
<b>Net income</b>	<b>10.4 %</b>	<b>-29.3 %</b>	<b>-5.5 %</b>	<b>4.9 %</b>	<b>2.1 %</b>	<b>6.7 %</b>	<b>7.6 %</b>

Sources: First Sensor (historical data), Warburg Research (forecasts)

### Balance sheet First Sensor

in EUR m

	2007	2008	2009	2010	2011E	2012E	2013E
<b>Assets</b>							
Intangible assets	17.0	2.4	2.4	5.2	34.4	37.1	33.7
thereof other intangible assets	5.8	0.6	0.5	2.2	16.9	14.6	11.2
thereof Goodwill	11.1	1.8	1.8	3.0	17.6	22.6	22.6
Property, plant and equipment	14.3	27.3	26.6	27.0	47.8	49.8	52.2
Financial assets	0.1	0.1	0.1	0.9	0.9	0.9	0.9
<b>Fixed assets</b>	<b>31.4</b>	<b>29.9</b>	<b>29.1</b>	<b>33.1</b>	<b>83.1</b>	<b>87.8</b>	<b>86.8</b>
Inventories	7.4	9.1	7.7	11.7	14.8	16.4	18.6
Accounts receivable	6.5	4.5	4.9	6.2	11.6	13.9	15.7
Other Assets	1.6	4.7	2.2	2.5	2.5	2.5	2.5
Liquid assets	10.2	4.6	17.1	14.6	28.9	25.7	23.7
<b>Current assets</b>	<b>25.6</b>	<b>22.9</b>	<b>31.9</b>	<b>35.0</b>	<b>57.9</b>	<b>58.5</b>	<b>60.5</b>
<b>Total assets</b>	<b>57.0</b>	<b>52.8</b>	<b>61.0</b>	<b>68.1</b>	<b>141</b>	<b>146</b>	<b>147</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	11.7	11.7	33.1	33.1	63.0	63.0	63.0
Additional paid-in capital	16.1	16.1	4.6	1.6	1.6	1.6	1.6
Surplus capital	-0.9	-0.9	-0.6	-0.2	1.1	8.8	18.7
Other equity components	7.2	-4.6	-1.8	3.5	-1.6	-1.6	-6.6
Book value	34.2	22.4	35.4	38.0	64.2	71.8	76.7
Minority Interest	0.1	0.1	0.0	0.1	0.1	0.1	0.1
<b>Total equity</b>	<b>34.3</b>	<b>22.5</b>	<b>35.4</b>	<b>38.1</b>	<b>64.2</b>	<b>71.9</b>	<b>76.8</b>
Provision for pensions and similar obligations	0.0	0.0	0.0	0.0	0.7	0.8	0.9
Provisions	0.6	0.6	0.8	1.5	2.2	2.3	2.4
Financial liabilities	10.6	16.5	13.5	13.2	48.0	44.6	39.6
Accounts payable	1.7	2.2	1.9	3.8	6.2	7.2	8.2
Other liabilities	9.9	11.0	9.5	11.6	20.4	20.4	20.4
<b>Liabilities</b>	<b>22.8</b>	<b>30.3</b>	<b>25.6</b>	<b>30.0</b>	<b>76.8</b>	<b>74.5</b>	<b>70.6</b>
<b>Total liabilities and shareholders' equity</b>	<b>57.0</b>	<b>52.8</b>	<b>61.0</b>	<b>68.1</b>	<b>141</b>	<b>146</b>	<b>147</b>

Sources: First Sensor (historical data), Warburg Research (forecasts)

### Balance sheet First Sensor

in % of Balance Sheet Total

	2007	2008	2009	2010	2011E	2012E	2013E
<b>Assets</b>							
Intangible assets	29.8 %	4.6 %	3.9 %	7.6 %	24.4 %	25.4 %	22.9 %
thereof other intangible assets	10.2 %	1.1 %	0.9 %	3.3 %	12.0 %	9.9 %	7.6 %
thereof Goodwill	19.6 %	3.5 %	3.0 %	4.4 %	12.5 %	15.4 %	15.3 %
Property, plant and equipment	25.1 %	51.7 %	43.7 %	39.6 %	33.9 %	34.0 %	35.4 %
Financial assets	0.2 %	0.2 %	0.2 %	1.3 %	0.6 %	0.6 %	0.6 %
<b>Fixed assets</b>	<b>55.1 %</b>	<b>56.6 %</b>	<b>47.8 %</b>	<b>48.6 %</b>	<b>59.0 %</b>	<b>60.0 %</b>	<b>58.9 %</b>
Inventories	12.9 %	17.3 %	12.6 %	17.2 %	10.5 %	11.2 %	12.6 %
Accounts receivable	11.4 %	8.5 %	8.0 %	9.1 %	8.2 %	9.5 %	10.7 %
Other Assets	2.8 %	8.8 %	3.6 %	3.7 %	1.8 %	1.7 %	1.7 %
Liquid assets	17.9 %	8.8 %	28.0 %	21.4 %	20.5 %	17.6 %	16.1 %
<b>Current assets</b>	<b>45.0 %</b>	<b>43.4 %</b>	<b>52.2 %</b>	<b>51.4 %</b>	<b>41.1 %</b>	<b>40.0 %</b>	<b>41.1 %</b>
<b>Total assets</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	20.5 %	22.2 %	54.3 %	48.7 %	44.7 %	43.0 %	42.8 %
Additional paid-in capital	28.3 %	30.6 %	7.6 %	2.4 %	1.2 %	1.1 %	1.1 %
Surplus capital	-1.5 %	-1.6 %	-1.0 %	-0.4 %	0.8 %	6.0 %	12.7 %
Other equity components	12.7 %	-8.7 %	-2.9 %	5.1 %	-1.2 %	-1.1 %	-4.5 %
Book value	60.0 %	42.4 %	58.0 %	55.8 %	45.5 %	49.1 %	52.1 %
Minority Interest	0.1 %	0.1 %	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %
<b>Total equity</b>	<b>60.1 %</b>	<b>42.5 %</b>	<b>58.0 %</b>	<b>55.9 %</b>	<b>45.6 %</b>	<b>49.1 %</b>	<b>52.1 %</b>
Provision for pensions and similar obligations	0.0 %	0.0 %	0.0 %	0.0 %	0.5 %	0.6 %	0.6 %
Provisions	1.0 %	1.1 %	1.2 %	2.1 %	1.5 %	1.5 %	1.6 %
Financial liabilities	18.5 %	31.3 %	22.1 %	19.4 %	34.0 %	30.5 %	26.9 %
Accounts payable	3.0 %	4.2 %	3.1 %	5.6 %	4.4 %	4.9 %	5.6 %
Other liabilities	17.4 %	20.8 %	15.5 %	17.0 %	14.5 %	14.0 %	13.9 %
<b>Liabilities</b>	<b>40.0 %</b>	<b>57.4 %</b>	<b>42.0 %</b>	<b>44.1 %</b>	<b>54.5 %</b>	<b>50.9 %</b>	<b>47.9 %</b>
<b>Total liabilities and shareholders' equity</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>

Sources: First Sensor (historical data), Warburg Research (forecasts)

## Statement of Cash Flows First Sensor

in EUR m

	2007	2008	2009	2010	2011E	2012E	2013E
Net income	5.0	-15.7	-1.9	2.3	1.4	7.7	9.8
Depreciation of fixed assets	2.5	3.0	3.1	3.3	4.1	4.9	5.2
Amortisation of goodwill	0.0	9.3	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.3	5.4	0.1	0.1	0.6	2.5	3.6
Increase/decrease in long-term provisions	0.1	0.0	0.2	-0.2	0.7	0.1	0.1
Other costs affecting income / expenses	0.1	-0.6	-0.7	0.5	0.0	0.0	0.0
<b>Cash Flow</b>	<b>8.0</b>	<b>1.4</b>	<b>0.7</b>	<b>6.0</b>	<b>6.7</b>	<b>15.2</b>	<b>18.7</b>
Increase / decrease in inventory	-4.3	-0.7	0.9	-2.2	2.9	-1.6	-2.2
Increase / decrease in accounts receivable	0.0	0.0	0.0	0.0	-0.4	-2.3	-1.8
Increase / decrease in accounts payable	0.3	1.9	-0.6	2.4	2.4	1.0	1.0
Increase / decrease in other working capital positions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital	-4.0	1.2	0.4	0.2	4.9	-2.9	-3.0
<b>Cash flow from operating activities</b>	<b>3.9</b>	<b>2.6</b>	<b>1.1</b>	<b>6.2</b>	<b>11.6</b>	<b>12.3</b>	<b>15.7</b>
CAPEX	-6.5	-16.6	-2.5	-3.8	-7.6	-7.1	-7.8
Payments for acquisitions	0.0	0.0	0.0	-4.2	-47.5	-5.0	-5.0
Financial investments	0.0	-0.1	0.0	-0.5	0.0	0.0	0.0
Income from asset disposals	1.1	3.0	2.4	0.1	0.0	0.0	0.0
<b>Cash flow from investing activities</b>	<b>-5.4</b>	<b>-13.7</b>	<b>-0.1</b>	<b>-8.4</b>	<b>-55.1</b>	<b>-12.1</b>	<b>-12.8</b>
Change in financial liabilities	0.3	5.9	-3.0	-0.4	34.8	-3.4	-5.0
Dividends paid	-0.4	-0.4	0.0	0.0	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	6.3	0.0	14.6	0.0	32.0	0.0	0.0
Others	0.0	0.0	-0.1	0.0	-9.0	0.0	0.0
<b>Cash flow from financing activities</b>	<b>6.2</b>	<b>5.6</b>	<b>11.5</b>	<b>-0.4</b>	<b>57.8</b>	<b>-3.4</b>	<b>-5.0</b>
Change in liquid funds	4.7	-5.6	12.5	-2.6	14.3	-3.2	-2.1
<b>Effects of exchange rate changes on cash</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Liquid assets at end of period</b>	<b>9.7</b>	<b>4.7</b>	<b>17.1</b>	<b>14.5</b>	<b>28.9</b>	<b>25.7</b>	<b>23.7</b>

Sources: First Sensor (historical data), Warburg Research (forecasts)

## Financial Ratios First Sensor

	2007	2008	2009	2010	2011E	2012E	2013E
<b>Operational Efficiency</b>							
Total Operating Costs / Sales	79.0 %	86.0 %	91.6 %	87.8 %	91.8 %	83.0 %	82.4 %
Sales per Employee	129,420	120,975	102,051	133,035	175,676	153,333	168,831
EBITDA per Employee	31,678	21,164	6,953	20,653	21,713	26,134	31,255
EBIT-margin	16.8 %	-28.5 %	-3.7 %	8.0 %	5.2 %	10.6 %	11.7 %
EBITDA / Operating Assets	34.6 %	17.8 %	5.7 %	17.9 %	12.2 %	27.6 %	31.5 %
ROA	12.2 %	-37.8 %	-5.7 %	6.7 %	1.7 %	8.7 %	11.3 %
<b>Efficiency of Capital Employment</b>							
Plant Turnover	2.6	1.4	1.1	1.7	1.4	2.3	2.5
Operating Assets Turnover	1.4	1.0	0.8	1.2	1.0	1.6	1.7
Capital Employed Turnover	0.8	1.0	0.6	0.9	0.6	1.0	1.1
<b>Return on Capital</b>							
ROCE	15.8 %	-26.1 %	-2.5 %	7.2 %	4.1 %	10.6 %	13.0 %
EBITDA / Avg. Capital Employed	23.1 %	16.1 %	4.7 %	14.0 %	9.8 %	17.0 %	20.5 %
ROE	11.2 %	-50.3 %	-4.7 %	5.8 %	2.2 %	10.7 %	12.8 %
Net Profit / Avg. Equity	13.2 %	-39.8 %	-5.8 %	6.1 %	2.7 %	11.3 %	13.2 %
Recurring Net Profit / Avg. Equity	13.3 %	-39.8 %	-5.8 %	6.3 %	2.7 %	11.3 %	13.2 %
ROIC	7.9 %	-24.7 %	-3.0 %	3.9 %	1.1 %	5.7 %	7.3 %
<b>Solvency</b>							
Net Debt	0.4	11.9	-3.6	-1.4	19.1	18.9	15.9
Net Gearing	1.1 %	52.9 %	-10.2 %	-3.7 %	29.7 %	26.3 %	20.8 %
Book Value of Equity / Book Value of Debt	324.4 %	136.1 %	262.1 %	288.7 %	133.8 %	161.2 %	193.8 %
Current ratio	1.7	1.4	1.8	1.7	1.9	1.8	1.8
Acid Test Ratio	1.2	0.8	1.3	1.1	1.3	1.2	1.2
EBITDA / Interest Paid	14.1	6.5	2.4	8.4	4.5	11.1	14.2
Interest Cover	14.8	n.a.	n.a.	5.0	2.0	7.3	9.5
<b>Cash Flow</b>							
Free Cash Flow	-2.5	-14.0	-1.4	2.3	4.0	5.2	7.9
Free Cash Flow / Sales	-6.9 %	-36.5 %	-4.7 %	5.2 %	6.2 %	4.5 %	6.1 %
Adj. Free Cash Flow	5.4	3.1	0.1	3.3	4.9	15.0	18.2
Adj. Free Cash Flow / Sales	9.4 %	5.1 %	-3.3 %	5.8 %	2.1 %	8.1 %	9.9 %
Free Cash Flow / Net Profit	-66.2 %	124.4 %	84.7 %	104.9 %	291.5 %	67.4 %	80.7 %
Interest Received / Avg. Cash	2.9 %	5.3 %	0.5 %	0.7 %	0.5 %	0.4 %	0.4 %
Interest Paid / Avg. Debt	6.3 %	7.6 %	5.7 %	6.3 %	5.8 %	3.8 %	4.0 %
Dividend Payout Ratio	9.6 %	100.0 %	0.0 %	0.0 %	0.0 %	0.0 %	10.0 %
<b>Fund Management</b>							
Investment ratio	17.6 %	43.4 %	8.2 %	9.5 %	11.7 %	6.2 %	6.0 %
Maint. Capex / Sales	6.5 %	6.2 %	8.2 %	6.4 %	6.9 %	4.4 %	4.0 %
Capex / Dep	227.8 %	94.4 %	78.5 %	126.1 %	163.4 %	95.9 %	88.6 %
Avg. Working Capital / Sales	27.7 %	29.1 %	33.0 %	24.0 %	23.4 %	17.2 %	17.5 %
Trade Creditors / Trade Debtors	377.9 %	202.9 %	255.7 %	163.3 %	187.1 %	193.1 %	191.5 %
Inventory turnover (days)	72.6	86.7	93.0	94.4	83.0	52.1	52.1
Receivables collection period (DSOs)	64.1	42.7	58.8	49.8	65.0	44.0	44.0
Payables collection period (days)	17.0	21.1	23.0	30.5	35.0	23.0	23.0
Cash conversion cycle (days)	117	99.1	114	98.3	102	67.1	67.8
<b>Valuation</b>							
Dividend Yield	1.2 %	1.2 %	n.a.	n.a.	n.a.	n.a.	1.2 %
P/B	2.4	3.7	2.3	2.2	1.3	1.2	1.1
EV/sales	2.2	2.1	2.7	1.8	1.6	0.9	0.8
EV/EBITDA	9.0	12.1	39.6	11.6	12.8	5.2	4.1
EV/EBIT	13.1	n.m.	n.m.	22.6	30.3	8.4	6.5
EV/FCF	n.m.	n.m.	n.m.	34.8	25.5	19.8	12.5
P/E	8.2	n.m.	n.m.	24.7	44.2	10.8	8.4
P/CF	10.4	61.1	115.5	13.8	12.3	5.5	4.4
Adj. Free Cash Flow Yield	6.6 %	3.8 %	0.1 %	4.0 %	4.7 %	14.6 %	18.2 %

Sources: First Sensor (historical data), Warburg Research (forecasts)

## Free Cash Flow Yield - First Sensor

Figures in EUR m	2007	2008	2009	2010	2011e	2012e	2013e	
Net Income	3.8	-11.3	-1.7	2.2	1.4	7.7	9.8	
+ Depreciation + Amortisation	2.9	17.7	3.2	3.4	4.7	7.4	8.8	
- Net Interest Income	-0.5	-0.6	-0.8	-0.6	-1.6	-1.2	-1.1	
+ Taxes	1.9	-0.3	-0.3	0.7	0.4	3.4	4.3	
- Maintenance Capex	2.4	2.4	2.5	2.9	4.5	5.1	5.2	
+ Others	-1.3	-1.3	0.5	-0.8	1.3	0.5	-0.7	
<b>= Adjusted Free Cash Flow</b>	<b>5.4</b>	<b>3.1</b>	<b>0.1</b>	<b>3.3</b>	<b>4.9</b>	<b>15.0</b>	<b>18.2</b>	
Adjusted Free Cash Flow Yield	6.6%	3.8%	0.1%	4.0%	4.7%	14.6%	18.2%	
Hurdle rate	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
<b>= Enterprise Value</b>	<b>81.4</b>	<b>81.4</b>	<b>81.4</b>	<b>81.4</b>	<b>102.6</b>	<b>102.5</b>	<b>99.7</b>	
<b>= Fair Enterprise Value</b>	<b>53.5</b>	<b>30.5</b>	<b>0.9</b>	<b>32.8</b>	<b>48.5</b>	<b>150.0</b>	<b>181.7</b>	
- Net Debt (Cash)	-1.4	-1.4	-1.4	-1.4	19.1	18.9	15.9	
- Pension Liabilities	0.0	0.0	0.0	0.0	0.7	0.8	0.9	
- Others	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
<b>= Fair Market Capitalisation</b>	<b>54.9</b>	<b>31.9</b>	<b>2.3</b>	<b>34.1</b>	<b>28.7</b>	<b>130.2</b>	<b>164.7</b>	
No. of shares (m)	9.8	9.8	9.8	9.8	9.8	9.8	9.8	
<b>= Fair value per share (EUR)</b>	<b>5.57</b>	<b>3.24</b>	<b>0.23</b>	<b>3.46</b>	<b>2.91</b>	<b>13.23</b>	<b>16.74</b>	
premium (-) / discount (+) in %	#NV	#NV	#NV	#NV	#NV	#NV	#NV	
<b>Sensitivity Fair value per Share (EUR)</b>								
	13.0%	4.32	2.52	0.21	2.69	1.77	9.71	12.48
	12.0%	4.67	2.72	0.21	2.91	2.09	10.69	13.66
	11.0%	5.08	2.96	0.22	3.16	2.46	11.85	15.06
Hurdle rate	<b>10.0%</b>	<b>5.57</b>	<b>3.24</b>	<b>0.23</b>	<b>3.46</b>	<b>2.91</b>	<b>13.23</b>	<b>16.74</b>
	9.0%	6.18	3.58	0.24	3.83	3.46	14.92	18.79
	8.0%	6.93	4.01	0.25	4.29	4.14	17.04	21.35
	7.0%	7.90	4.57	0.27	4.89	5.02	19.76	24.65

Sources: First Sensor (historical data), Warburg Research (estimates)

### DCF Model - First Sensor

Figures in EUR m	2011e	2012e	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e
Sales	65.0	115.0	130.0	140.4	150.2	159.2	167.2	174.4	180.8	186.4	191.3	195.6	199.5	203.5
Change	43.7%	76.9%	13.0%	8.0%	7.0%	6.0%	5.1%	4.3%	3.7%	3.1%	2.6%	2.2%	2.0%	2.0%
EBIT	3.4	12.2	15.3	17.6	18.8	19.9	20.9	21.8	22.4	22.8	23.2	23.5	23.7	22.4
EBIT-Margin	5.2%	10.6%	11.7%	12.5%	12.5%	12.5%	12.5%	12.5%	12.4%	12.3%	12.1%	12.0%	11.9%	11.0%
Tax rate	24.0%	30.5%	30.5%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
NOPAT	2.6	8.5	10.6	12.3	13.1	13.9	14.6	15.3	15.7	16.0	16.2	16.4	16.6	15.7
Depreciation	4.7	7.4	8.8	9.8	10.5	10.7	10.8	10.8	10.7	10.6	10.5	10.3	10.1	9.9
in % of Sales	7.2%	6.4%	6.8%	7.0%	7.0%	6.7%	6.5%	6.2%	5.9%	5.7%	5.5%	5.3%	5.0%	4.8%
Change in Liquidity from														
- Working Capital	-6.1	-2.9	-3.0	-1.1	-1.8	-1.6	-1.4	-1.3	-1.1	-1.0	-0.9	-0.8	-0.7	-0.7
- Capex	-7.6	-7.1	-7.8	-9.8	-10.5	-10.7	-10.8	-10.8	-10.7	-10.6	-10.5	-10.3	-10.1	-9.9
Capex in % of Sales	11.7%	6.2%	6.0%	7.0%	7.0%	6.7%	6.5%	6.2%	5.9%	5.7%	5.5%	5.3%	5.0%	4.8%
Other	0.7	0.1	0.1	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0
Free Cash Flow (WACC-Model)	-5.8	6.0	8.7	11.0	11.3	12.2	13.0	13.8	14.3	15.0	15.4	15.7	15.9	15.0

#### Model parameter

Debt ratio	25.00%	Beta	1.40
Costs of Debt	5.0%	WACC	9.13%
Market return	9.00%		
Risk free rate	4.00%	Terminal Growth	2.00%

#### Valuation (mln)

Present values 2024e	82.1		
Terminal Value	66.5		
Liabilities	-43.2		
Liquidity	8.6	No. of shares (mln)	9.84
<b>Equity Value</b>	<b>113.9</b>	<b>Value per share (EUR)</b>	<b>11.58</b>

#### Sensitivity Value per Share (EUR)

##### Terminal Growth

WACC	1.25%	1.50%	1.75%	<b>2.00%</b>	2.25%	2.50%	2.75%
10.13%	9.10	9.24	9.38	9.54	9.71	9.89	10.07
9.63%	9.96	10.13	10.30	10.49	10.69	10.91	11.14
9.38%	10.43	10.61	10.81	11.02	11.24	11.48	11.73
<b>9.13%</b>	10.93	11.13	11.35	<b>11.58</b>	11.82	12.08	12.37
8.88%	11.47	11.69	11.92	12.18	12.45	12.74	13.06
8.63%	12.04	12.28	12.54	12.82	13.12	13.45	13.81
8.13%	13.31	13.60	13.93	14.27	14.65	15.06	15.51

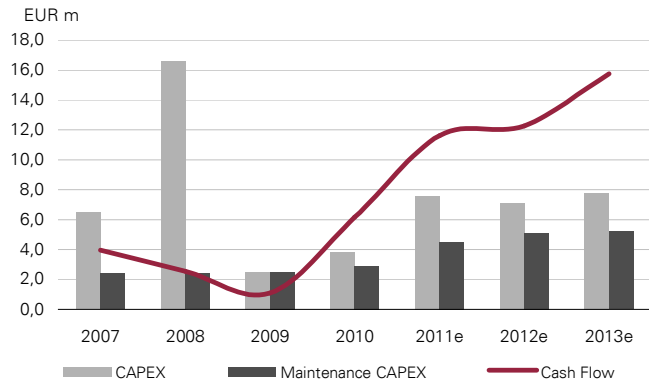
##### Delta EBIT margin

WACC	-1.5 pp	-1.0 pp	-0.5 pp	<b>0.0</b>	+0.5 pp	+1.0 pp	+1.5 pp
10.13%	7.54	8.21	8.87	9.54	10.21	10.88	11.54
9.63%	8.36	9.07	9.78	10.49	11.20	11.92	12.63
9.38%	8.81	9.54	10.28	11.02	11.75	12.49	13.22
<b>9.13%</b>	9.29	10.05	10.81	<b>11.58</b>	12.34	13.10	13.86
8.88%	9.80	10.59	11.39	12.18	12.97	13.76	14.55
8.63%	10.36	11.18	12.00	12.82	13.64	14.47	15.29
8.13%	11.60	12.49	13.38	14.27	15.16	16.05	16.94

Source: Warburg Research



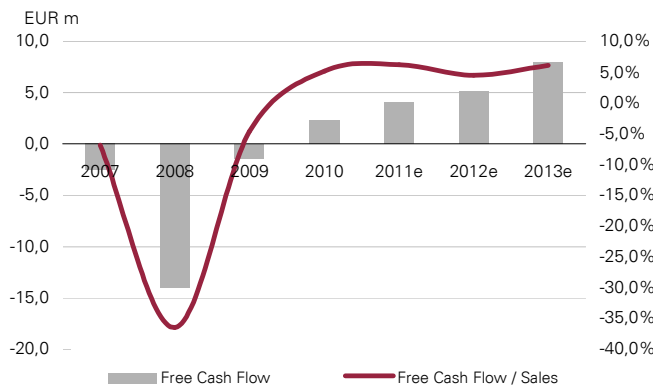
## CAPEX and Cash Flow - First Sensor



Sources: First Sensor (historical data), Warburg Research (forecasts)

- 2006 and 2007: Expansions of production capacities are followed by...
- ...significant investments due to the new construction of a sensor factory in 2008

## Free Cash Flow Generation - First Sensor



Sources: First Sensor (historical data), Warburg Research (forecasts)

- 2007-2008: Expansion of production capacities...
- ...and new construction of the sensor factory in 2008 lead to negative free cash flow

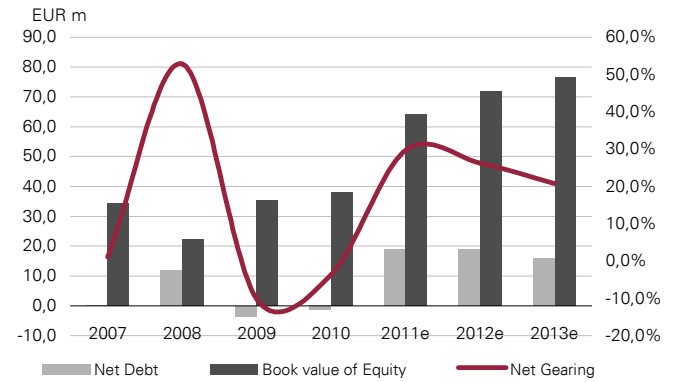
## Operating Leverage - First Sensor



Sources: First Sensor (historical data), Warburg Research (forecasts)

- 2008: Expansion of personnel capacities
- ...and the recession in 2009e are burdening the OL

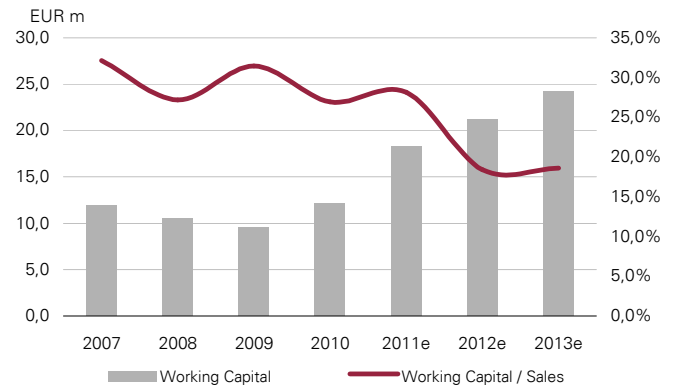
## Balance Sheet Quality - First Sensor



Sources: First Sensor (historical data), Warburg Research (forecasts)

- 2008: New construction of a sensor factory entails increase in net debt
- 2011e: Capital increase, rising leverage due to acquisition of Sensortechics

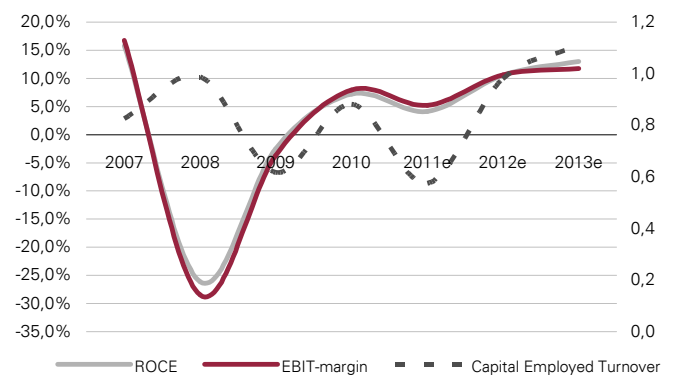
## Working Capital - First Sensor



Sources: First Sensor (historical data), Warburg Research (forecasts)

- The working capital ratio is expected at ca. 26% in the long term
- 2011e: Increase due to acquisition of Sensortechics Group

## ROCE Development - First Sensor



Sources: First Sensor (historical data), Warburg Research (forecasts)

- 2008: Balance sheet adjustment leads to a decrease in the EBIT margin

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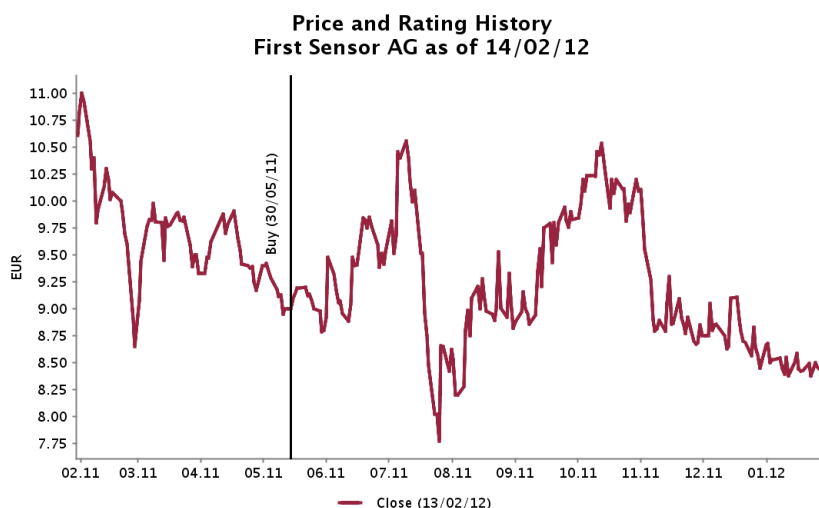
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