(CDAX, Technology, DAM GR)



Buy EUR 98.00	(EUR 77.00)	DCF: 98.40 ES Ba		Warburg ESG Risk Score: ESG Score (MSCI based): Balance Sheet Score: Market Liquidity Score:	2.7 3.0 5.0 0.0	Description: Producer and Distributor of displays for special applications in the industry.		
		Market Snapshot:	EUR m	Shareholders:		Key Figures (WRe):	2023e	
		Market cap:	211.6	Freefloat	30.80 %	Beta:	1.3	
Price	EUR 60.00	No. of shares (m):	3.5	Arrow Electronics	69.20 %	Price / Book:	1.4 x	
Upside	63.3 %	EV:	214.7			Equity Ratio:	62 %	
		Freefloat MC:	65.2			Net Fin. Debt / EBITDA:	0.1 x	
		Ø Trad. Vol. (30d):	54.64 th			Net Debt / EBITDA:	0.1 x	

Strong growth continues

Data Modul - Q	4 2022							Comment on Figures: • The Q4 numbers of Data Modul exceeded expectations.
Figures in EUR m	Q4/22	Q4/22e	Q4/21	yoy	2022	2021	yoy	 In 2022, earnings were driven by higher revenues and lower cos revenue side the company was able to address growth markets
Sales	71,5	65,5	57,0	25,4%	276,1	194,8	41,7%	able to deliver despite the "chip crisis" while on the cost side, a st
EBIT	7,2	5,8	4,7	53,3%	27,2	12,7	113,8%	to lower cost regions (Poland) took centre stage.
margin	10.1%	8.8%	8.3%		9.8%	6.5%		

Data Modul has achieved record-breaking results for FY 2022 with a significant increase in order entries (+29.1% to EUR 301.8m), sales, and EBIT. The order situation, in particular, provides an excellent basis and high visibility for the new increased estimates (WRe, see below).

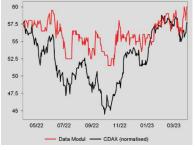
Despite challenging market conditions, the company was able to record these positive numbers on the strength of its conservative inventory policy (always able to deliver "all" parts of an advanced display, "avoiding the golden screw") and by continuously monitoring costs (i.e. cheaper production costs in Poland). Over the years, the company has continuously repositioned itself with successful strategic programmes such as "Fit for Future 2015", which started in 2012 to drive performance, then "Shape 2020", which started in 2015 to strengthen core competence and "Touch Tomorrow 2023", which started in 2018 to scale up for the future. Now, another ambitious strategy programme can be expected. Parallel to this operational success, the export rate has steadily risen to 55.5% (50.5%) and focuses on the most attractive segments of the display markets such as industry, medical, smart retail und e-mobility (charging). The executive board sees attractive business opportunities for Data Modul in 2023 as inflation gradually flattens and economic growth accelerates.

The share continues to be rated Buy with a price target of EUR 98 (77), which offers interesting upside potential.

Changes in E	stimates:					
FY End: 31.12. in EUR m	2023e (old)	+ / -	2024e (old)	+ / -	2025e (old)	+/-
Sales EBIT EPS	298.0 27.7 5.19	5.7 % 5.7 % 8.5 %	324.8 30.2 5.64	5.7 % 5.7 % 8.2 %	n.a. n.a. n.a.	n.m. n.m. n.m.

Comment on Changes:

- The strong order situation of Data Modul offers potential for 2023 and beyond.
- On the basis of the numbers, the DCF model now shows further interesting upside.
- The recent margin development allows for an increase in the long-term EBIT margin expectation (DCF) from 9% to 10%.



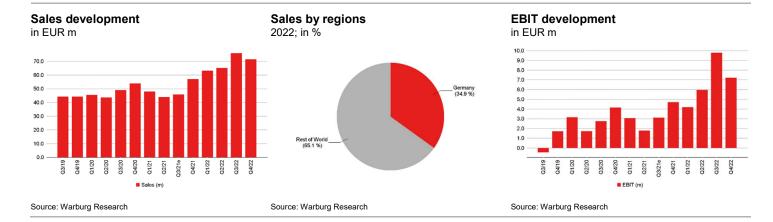
Rel. Performance vs CDAX:	
1 month:	2.9 %
6 months:	-14.7 %
Year to date:	-3.6 %
Trailing 12 months:	3.7 %

FY End: 31.12.	CAGR							
in EUR m	(22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
Sales	10.7 %	203.3	192.2	194.8	276.1	315.0	343.4	374.3
Change Sales yoy		-15.8 %	-5.5 %	1.3 %	41.7 %	14.1 %	9.0 %	9.0 %
Gross profit margin		21.6 %	21.7 %	21.8 %	23.1 %	22.8 %	22.8 %	22.8 %
EBITDA	8.4 %	15.6	17.8	18.6	33.0	36.0	38.9	42.0
Margin		7.7 %	9.2 %	9.5 %	11.9 %	11.4 %	11.3 %	11.2 %
EBIT	8.6 %	10.2	11.8	12.7	27.2	29.3	31.9	34.8
Margin		5.0 %	6.2 %	6.5 %	9.8 %	9.3 %	9.3 %	9.3 %
Net income	8.5 %	6.5	7.6	7.9	18.4	19.9	21.5	23.5
EPS	8.5 %	1.85	2.14	2.24	5.21	5.63	6.10	6.66
EPS adj.	8.5 %	1.85	2.14	2.24	5.21	5.63	6.10	6.66
DPS	0.0 %	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Dividend Yield		0.2 %	0.3 %	0.2 %	0.2 %	0.2 %	0.2 %	0.2 %
FCFPS		0.99	2.08	-5.31	-1.76	0.78	2.88	3.11
FCF / Market cap		1.6 %	4.7 %	-9.8 %	-3.1 %	1.3 %	4.8 %	5.3 %
EV / Sales		1.0 x	0.7 x	1.0 x	0.7 x	0.7 x	0.6 x	0.5 x
EV / EBITDA		12.5 x	7.4 x	10.1 x	6.2 x	6.0 x	5.3 x	4.5 x
EV / EBIT		19.2 x	11.1 x	14.8 x	7.5 x	7.3 x	6.4 x	5.5 x
P/E		33.1 x	20.6 x	24.3 x	10.8 x	10.7 x	9.8 x	8.9 x
P / E adj.		33.1 x	20.6 x	24.3 x	10.8 x	10.7 x	9.8 x	8.9 x
FCF Potential Yield		1.4 %	3.4 %	4.5 %	7.0 %	10.5 %	12.0 %	14.0 %
Net Debt		-20.7	-25.1	-3.7	5.5	3.2	-6.6	-17.1
ROCE (NOPAT)		9.0 %	10.1 %	9.3 %	15.0 %	13.9 %	13.7 %	13.9 %
	Sales up to +1	10%, EBIT up	to +10%					
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Company events:

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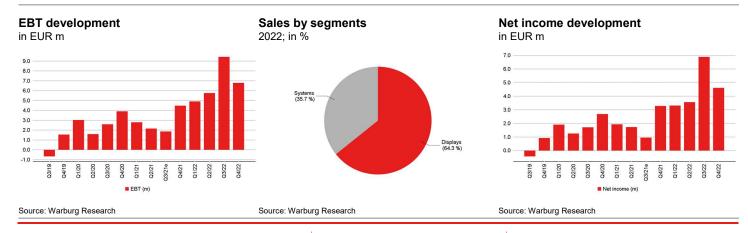


Company Background

- Data Modul acts as a display integrator with a long expirience in the market (50 years).
- With its global presence, Data Modul offers display- and embedded solutions for OEMs.
- With its own products, Data Modul forms a value-adding interface between panel manufacturers and customers. Commercial products complete the offer.
- Markets dominated by megatrends such as industrial HMI, smart retail, medical and e-mobility are growing areas of increasing importance.

Competitive Quality

- Europe's largest display distributor.
- Focus on niche markets that are too small or individual to be directly served by large display manufacturers, which leads to comparatively low competitive intensity.
- High customer loyalty through design-in of the customers' products and software competence.
- The global positioning of Data Modul (production/logistics in Europe, Asia, USA) enables competitively leading sourcing.



Data Modul



DCF model														
	Detailed	d forecas	t period				7	ransition	al period					Term. Value
Figures in EUR m	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	315.0	343.4	374.3	400.4	428.5	454.2	476.9	500.7	525.8	552.1	579.7	608.7	626.9	
Sales change	14.1 %	9.0 %	9.0 %	7.0 %	7.0 %	6.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	3.0 %	2.0 %
EBIT	29.3	31.9	34.8	40.0	42.8	45.4	47.7	50.1	52.6	55.2	58.0	60.9	62.7	
EBIT-margin	9.3 %	9.3 %	9.3 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	
Tax rate (EBT)	31.0 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	31.5 %	
NOPAT	20.2	21.9	23.8	27.4	29.4	31.1	32.7	34.3	36.0	37.8	39.7	41.7	42.9	
Depreciation	6.7	7.0	7.2	8.0	8.6	9.1	9.5	10.0	10.5	11.0	11.6	12.2	12.5	
in % of Sales	2.1 %	2.0 %	1.9 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	
Changes in provisions	0.0	0.0	0.0	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Change in Liquidity from														
- Working Capital	18.4	13.0	14.4	10.7	4.3	2.2	0.0	-0.5	-1.0	-1.6	-2.2	- 2.9	-7.1	
- Capex	6.0	6.0	6.0	8.0	8.6	9.1	9.5	10.0	10.5	11.0	11.6	12.2	12.5	
Capex in % of Sales	1.9 %	1.7 %	1.6 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	
- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	2.5	9.9	10.6	17.6	25.2	29.0	32.8	34.9	37.1	39.5	42.1	44.7	50.1	40
PV of FCF	2.3	8.5	8.4	12.6	16.5	17.4	17.9	17.4	16.9	16.4	16.0	15.5	15.9	171
share of PVs		5.44 %						46.1	1 %					48.45 %

Model parameter				Valuation (m)						
Derivation of WACC:		Derivation of Beta:		Present values 2035e	182					
				Terminal Value	171					
Debt ratio	5.00 %	Financial Strength	1.30	Financial liabilities	20					
Cost of debt (after tax)	1.7 %	Liquidity (share)	1.30	Pension liabilities	1					
Market return	8.25 %	Cyclicality	1.30	Hybrid capital	0					
Risk free rate	2.75 %	Transparency	1.30	Minority interest	0					
		Others	1.30	Market val. of investments	0					
				Liquidity	16	No. of shares (m)	3.5			
WACC	9.49 %	Beta	1.30	Equity Value	347	Value per share (EUR)	98.40			

Selis	ilivily va	iue per Sii	are (EUK)													
		Terminal C	Growth								Delta EBIT	-margin					
Beta	WACC	1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.49	10.5 %	81.57	82.54	83.57	84.66	85.81	87.04	88.35	1.49	10.5 %	69.26	74.39	79.52	84.66	89.79	94.92	100.05
1.40	10.0 %	87.41	88.57	89.79	91.09	92.47	93.95	95.53	1.40	10.0 %	74.66	80.14	85.61	91.09	96.57	102.05	107.52
1.35	9.7 %	90.61	91.86	93.20	94.63	96.15	97.77	99.51	1.35	9.7 %	77.62	83.29	88.96	94.63	100.29	105.96	111.63
1.30	9.5 %	94.00	95.37	96.84	98.40	100.07	101.86	103.79	1.30	9.5 %	80.79	86.66	92.53	98.40	104.27	110.14	116.01
1.25	9.2 %	97.60	99.11	100.72	102.44	104.29	106.27	108.40	1.25	9.2 %	84.18	90.27	96.36	102.44	108.53	114.62	120.70
1.20	9.0 %	101.45	103.11	104.88	106.78	108.82	111.01	113.38	1.20	9.0 %	87.82	94.14	100.46	106.78	113.10	119.42	125.74
1.11	8.5 %	109.97	111.98	114.14	116.47	118.98	121.70	124.67	1.11	8.5 %	95.95	102.79	109.63	116.47	123.31	130.15	136.99

[•] Revenue is expected to grow based on the continuous expansion in the use of display technology.

Data Modul



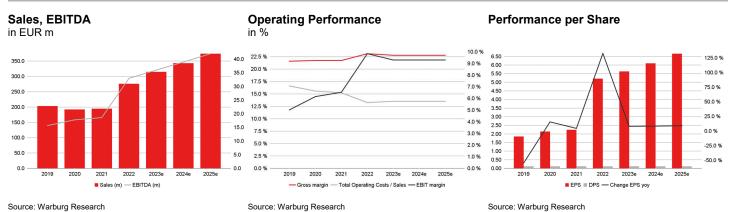
Valuation							
	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	2.2 x	1.5 x	1.7 x	1.5 x	1.4 x	1.2 x	1.1 x
Book value per share ex intangibles	22.62	23.35	25.06	29.68	36.10	43.05	50.58
EV / Sales	1.0 x	0.7 x	1.0 x	0.7 x	0.7 x	0.6 x	0.5 x
EV / EBITDA	12.5 x	7.4 x	10.1 x	6.2 x	6.0 x	5.3 x	4.5 x
EV / EBIT	19.2 x	11.1 x	14.8 x	7.5 x	7.3 x	6.4 x	5.5 x
EV / EBIT adj.*	19.2 x	11.1 x	14.8 x	7.5 x	7.3 x	6.4 x	5.5 x
P / FCF	62.1 x	21.2 x	n.a.	n.a.	76.7 x	20.8 x	19.0 x
P/E	33.1 x	20.6 x	24.3 x	10.8 x	10.7 x	9.8 x	8.9 x
P / E adj.*	33.1 x	20.6 x	24.3 x	10.8 x	10.7 x	9.8 x	8.9 x
Dividend Yield	0.2 %	0.3 %	0.2 %	0.2 %	0.2 %	0.2 %	0.2 %
FCF Potential Yield (on market EV)	1.4 %	3.4 %	4.5 %	7.0 %	10.5 %	12.0 %	14.0 %
*Adjustments made for: -							



Consolidated profit and loss							
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Sales	203.3	192.2	194.8	276.1	315.0	343.4	374.3
Change Sales yoy	-15.8 %	-5.5 %	1.3 %	41.7 %	14.1 %	9.0 %	9.0 %
COGS	159.4	150.4	152.4	212.2	243.2	265.1	288.9
Gross profit	43.9	41.8	42.4	63.8	71.8	78.3	85.3
Gross margin	21.6 %	21.7 %	21.8 %	23.1 %	22.8 %	22.8 %	22.8 %
Research and development	4.9	5.5	5.7	6.7	7.9	8.6	9.4
Sales and marketing	28.8	24.6	25.0	30.1	34.7	37.8	41.2
Administration expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other operating expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other operating income	0.0	0.1	1.0	0.1	0.0	0.0	0.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	15.6	17.8	18.6	33.0	36.0	38.9	42.0
Margin	7.7 %	9.2 %	9.5 %	11.9 %	11.4 %	11.3 %	11.2 %
Depreciation of fixed assets	1.2	1.2	1.2	0.8	1.5	1.6	1.6
EBITA	14.4	16.6	17.4	32.2	34.5	37.3	40.4
Amortisation of intangible assets	4.3	4.7	4.7	5.0	5.2	5.4	5.6
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	10.2	11.8	12.7	27.2	29.3	31.9	34.8
Margin	5.0 %	6.2 %	6.5 %	9.8 %	9.3 %	9.3 %	9.3 %
EBIT adj.	10.2	11.8	12.7	27.2	29.3	31.9	34.8
Interest income	0.0	2.3	0.0	0.7	0.7	0.7	0.7
Interest expenses	0.6	3.0	1.4	0.9	1.2	1.2	1.2
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	9.6	11.1	11.3	26.9	28.8	31.4	34.3
Margin	4.7 %	5.8 %	5.8 %	9.7 %	9.1 %	9.1 %	9.2 %
Total taxes	3.1	3.6	3.4	8.5	8.9	9.9	10.8
Net income from continuing operations	6.5	7.6	7.9	18.4	19.9	21.5	23.5
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	6.5	7.6	7.9	18.4	19.9	21.5	23.5
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	6.5	7.6	7.9	18.4	19.9	21.5	23.5
Margin	3.2 %	3.9 %	4.1 %	6.7 %	6.3 %	6.3 %	6.3 %
Number of shares, average	3.5	3.5	3.5	3.5	3.5	3.5	3.5
EPS	1.85	2.14	2.24	5.21	5.63	6.10	6.66
EPS adj.	1.85	2.14	2.24	5.21	5.63	6.10	6.66
*Adjustments made for:							

Guidance: Sales up to +10%, EBIT up to +10%

Financial Ratios							
	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	16.6 %	15.6 %	15.2 %	13.3 %	13.5 %	13.5 %	13.5 %
Operating Leverage	3.2 x	-2.9 x	5.5 x	2.7 x	0.6 x	1.0 x	1.0 x
EBITDA / Interest expenses	26.5 x	5.8 x	13.1 x	34.8 x	30.0 x	32.4 x	35.0 x
Tax rate (EBT)	32.3 %	31.9 %	30.1 %	31.6 %	31.0 %	31.5 %	31.5 %
Dividend Payout Ratio	6.5 %	5.6 %	5.4 %	2.3 %	2.1 %	2.0 %	1.8 %
Sales per Employee	472,823	427,078	416,184	589,857	642,857	686,700	748,503

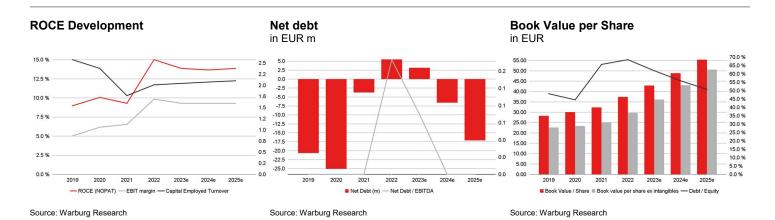


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Consolidated balance sheet							
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Assets							
Goodwill and other intangible assets	19.8	23.5	25.6	27.1	23.9	20.5	16.9
thereof other intangible assets	17.4	21.1	23.1	24.7	21.5	18.1	14.5
thereof Goodwill	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Property, plant and equipment	19.4	18.6	17.7	17.7	20.2	22.6	25.0
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	39.2	42.1	43.2	44.8	44.1	43.1	41.9
Inventories	41.5	52.0	86.7	109.8	125.3	136.6	148.9
Accounts receivable	27.9	24.2	29.2	37.6	43.2	47.0	51.3
Liquid assets	26.4	26.7	20.2	15.7	18.0	27.7	38.3
Other short-term assets	12.5	8.0	9.4	14.2	14.2	14.2	14.2
Current assets	108.4	110.9	145.6	177.2	200.7	225.5	252.6
Total Assets	147.6	153.0	188.8	222.0	244.8	268.6	294.5
Liabilities and shareholders' equity							
Subscribed capital	10.6	10.6	10.6	10.6	10.6	10.6	10.6
Capital reserve	24.1	24.1	24.1	24.1	24.1	24.1	24.1
Retained earnings	64.0	71.1	78.5	96.2	115.7	136.9	160.1
Other equity components	0.9	0.1	0.7	0.9	8.0	0.7	0.5
Shareholders' equity	99.6	105.9	113.9	131.8	151.2	172.3	195.3
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	99.6	105.9	113.9	131.8	151.2	172.3	195.3
Provisions	18.6	19.5	23.7	22.5	23.1	23.8	24.5
thereof provisions for pensions and similar obligations	1.6	1.6	1.5	1.2	1.2	1.2	1.2
Financial liabilities (total)	4.2	0.0	15.0	20.0	20.0	20.0	20.0
Short-term financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts payable	9.2	11.8	21.0	19.7	22.4	24.5	26.7
Other liabilities	16.0	15.9	15.3	28.0	28.0	28.0	28.0
Liabilities	48.0	47.1	74.9	90.3	93.6	96.3	99.2
Total liabilities and shareholders' equity	147.6	153.0	188.8	222.0	244.8	268.6	294.5

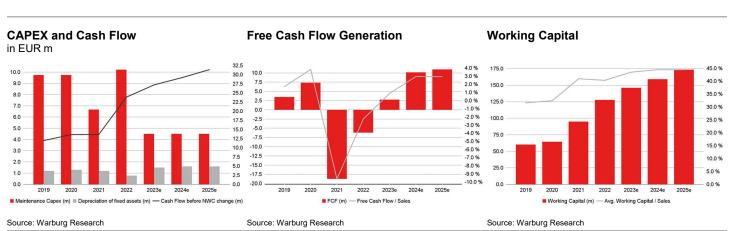
Financial Ratios							
	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	2.6 x	2.3 x	1.7 x	1.9 x	1.9 x	1.9 x	1.9 x
Capital Employed Turnover	2.6 x	2.4 x	1.8 x	2.0 x	2.0 x	2.1 x	2.1 x
ROA	16.6 %	18.0 %	18.3 %	41.0 %	45.0 %	49.9 %	56.1 %
Return on Capital							
ROCE (NOPAT)	9.0 %	10.1 %	9.3 %	15.0 %	13.9 %	13.7 %	13.9 %
ROE	6.7 %	7.4 %	7.2 %	15.0 %	14.0 %	13.3 %	12.8 %
Adj. ROE	6.7 %	7.4 %	7.2 %	15.0 %	14.0 %	13.3 %	12.8 %
Balance sheet quality							
Net Debt	-20.7	-25.1	-3.7	5.5	3.2	-6.6	-17.1
Net Financial Debt	- 22.2	-26.7	-5.2	4.3	2.0	-7.7	-18.3
Net Gearing	- 20.7 %	-23.7 %	-3.3 %	4.2 %	2.1 %	-3.8 %	-8.8 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	13.2 %	5.6 %	n.a.	n.a.
Book Value / Share	28.2	30.0	32.3	37.4	42.9	48.9	55.4
Book value per share ex intangibles	22.6	23.4	25.1	29.7	36.1	43.0	50.6





Consolidated cash flow statement							
In EUR m	2019	2020	2021	2022	2023e	2024e	2025
Net income	6.5	7.6	7.9	18.4	19.9	21.5	23.5
Depreciation of fixed assets	1.2	1.3	1.2	8.0	1.5	1.6	1.6
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	4.3	4.7	4.7	5.0	5.2	5.4	5.6
Increase/decrease in long-term provisions	0.0	0.0	-0.1	-0.3	0.0	0.0	0.0
Other non-cash income and expenses	0.0	0.0	0.0	0.0	0.6	0.7	0.7
Cash Flow before NWC change	12.0	13.6	13.7	23.9	27.2	29.2	31.4
Increase / decrease in inventory	11.4	-10.5	-34.7	-23.1	-15.5	-11.3	-12.3
Increase / decrease in accounts receivable	1.1	3.7	-5.0	-8.4	-5.6	-3.8	-4.3
Increase / decrease in accounts payable	-4.5	2.6	9.2	-1.2	2.7	2.1	2.2
Increase / decrease in other working capital positions	-9.4	1.4	1.2	6.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	-1.5	-2.8	-29.4	-26.7	-18.4	-13.0	-14.4
Net cash provided by operating activities [1]	10.4	10.8	-15.7	-2.8	8.8	16.2	17.0
Investments in intangible assets	-6.3	-6.3	-3.0	-5.8	-2.0	-2.0	-2.0
Investments in property, plant and equipment	-4.0	-4.0	-4.0	-5.0	-4.0	-4.0	-4.0
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	-7.0	-3.4	-3.0	-3.4	-6.0	-6.0	-6.0
Change in financial liabilities	0.0	-4.2	15.0	5.0	0.0	0.0	0.0
Dividends paid	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	-1.6	-2.3	-2.4	-2.9	0.0	0.0	0.0
Net cash provided by financing activities [3]	-2.0	-6.9	12.2	1.6	-0.4	-0.4	-0.4
Change in liquid funds [1]+[2]+[3]	1.5	0.4	-6.5	-4.6	2.3	9.7	10.5
Effects of exchange-rate changes on cash	0.0	-0.2	0.1	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	26.4	26.7	20.2	15.7	18.0	27.7	38.3

Financial Ratios							
	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	3.5	7.3	-18.7	-6.2	2.8	10.2	11.0
Free Cash Flow / Sales	1.7 %	3.8 %	-9.6 %	-2.2 %	0.9 %	3.0 %	2.9 %
Free Cash Flow Potential	2.8	4.5	8.5	14.3	22.6	24.5	26.7
Free Cash Flow / Net Profit	53.5 %	97.2 %	-237.3 %	-33.7 %	13.9 %	47.3 %	46.7 %
Interest Received / Avg. Cash	0.0 %	8.8 %	0.0 %	3.8 %	4.0 %	3.0 %	2.1 %
Interest Paid / Avg. Debt	14.1 %	145.0 %	18.9 %	5.4 %	6.0 %	6.0 %	6.0 %
Management of Funds							
Investment ratio	5.0 %	5.3 %	3.6 %	3.9 %	1.9 %	1.7 %	1.6 %
Maint. Capex / Sales	4.8 %	5.1 %	3.4 %	3.7 %	1.4 %	1.3 %	1.2 %
Capex / Dep	188.2 %	172.8 %	119.5 %	184.9 %	89.6 %	85.7 %	83.3 %
Avg. Working Capital / Sales	31.6 %	32.4 %	40.9 %	40.3 %	43.5 %	44.4 %	44.4 %
Trade Debtors / Trade Creditors	303.1 %	205.1 %	139.4 %	190.7 %	192.9 %	191.8 %	192.1 %
Inventory Turnover	3.8 x	2.9 x	1.8 x	1.9 x	1.9 x	1.9 x	1.9 x
Receivables collection period (days)	50	46	55	50	50	50	50
Payables payment period (days)	21	29	50	34	34	34	34
Cash conversion cycle (Days)	124	144	212	205	205	204	204



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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
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Investment recommendation: expected direction of the share price development of the financial instrument up to the given <u>price target</u> in the opinion of the analyst who covers this financial instrument.

<u>"_"</u>	Rating suspended:	The available information currently does not permit an evaluation of the company.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.

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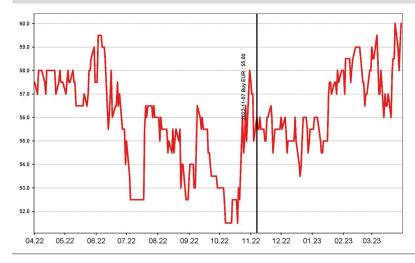
Rating	Number of stocks	% of Universe
Buy	159	74
Hold	46	21
Sell	7	3
Rating suspended	3	1
Total	215	100

WARBURG RESEARCH GMBH - ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	44	86
Hold	6	12
Sell	0	0
Rating suspended	1	2
Total	51	100

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