

## Data Patterns (India) Ltd.

Recommendation	SUBSCRIBE		BACKGROUND				
Price Band	Rs. 555-585		Data Patterns (DP) is one of the few integrated defence and aerospace electronics solutions provider catering to the indigenously developed defence products industry. DP has proven in-house design and development capabilities and experience of more than three decades in the defence and aerospace electronics space. Radars make up 62% of the order book with the rest comprising of electronic warfare suite, communications, avionics, BrahMos programme, service contracts and others.				
Bidding Date	14 – 16 Dec, 2021						
BRLM	IIFL Sec., JM Financial						
Registrar	Link Intime India Pvt Ltd						
Sector	Defence						
<b>Minimum Retail Application</b>			<b>Details and Objects of the Issue</b>				
Number of Shares	25		<ul style="list-style-type: none"> <li>The total issue size is Rs. 588 Cr constituting (i) Offer For Sale of up to 0.595 Cr equity shares aggregating to Rs. 348 Cr; and (ii) Fresh issue of up to 0.41 Cr equity shares aggregating to Rs. 240 Cr. The offer shall constitute 19.4% of the post-offer paid-up equity capital of the company.</li> <li>DP shall utilise the proceeds from the fresh issue for repaying debt, funding working capital requirements and expanding its Chennai facility.</li> </ul>				
Min. Application Money	Rs. 14,625		<b>Investment Rationale</b>				
Discount to retail	N.A		<ul style="list-style-type: none"> <li>Integrated and strategic defence and aerospace electronics solutions provider which is well positioned to benefit from the 'Make in India' opportunity</li> <li>Superior business positioning backed by in-house design, development and manufacturing capabilities across multiple segments</li> <li>Indian military radar market to grow at ~11% CAGR till 2030 and reach USD 3.18 Bn</li> <li>Strong order book of Rs. 581 Cr (2.6x FY21 revenue) and pipeline of Rs. 1500 Cr over next 3 years</li> <li>Transition from development stage to production stage resulting in an increase in return ratios</li> </ul>				
Payment Mode	ASBA		<b>Valuation and Recommendation</b>				
<b>Financials (Rs Cr)</b>	<b>FY20</b>	<b>FY21</b>	DP is a proxy play on India's indigenization of defence products. With strong capabilities across segments, robust order book of Rs. 581 Cr (2.6x FY21 revenue) and an order pipeline of Rs. 1500 Cr, DP is on track to deliver good growth in coming years. Even on historical basis, we note that it's growth has outperformed listed peers. Higher margins more than compensates for the lengthy working capital cycle resulting in satisfactory cash flow based ROCE (pre-tax cash flow from operations / capital employed - at 36% over FY19-21). <b>We recommend investors to subscribe to the issue for listing gains as well as from a long term perspective.</b>				
Total Income	156	224	<b>Financials (Rs Cr)</b>				
EBITDA	43	92	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>H1FY22</b>	
Adjusted PAT	21	56	Net Revenues	131	156	224	96
<b>Valuations</b>	<b>Upper Band</b>		<i>Growth</i>	19%	43%	117%	
Market Cap (Rs Cr)	3035		EBIDTA	26	43	92	38
EPS	10.7		<i>EBITDA Margins</i>	19.5%	27.6%	41.1%	39.2%
P/E Ratio	54.6		Adjusted PAT	8	21	56	23
EV/ EBITDA	33.3		<i>Growth</i>	173%	164%	Loss to Profit	
Enterprise Value (Rs Cr)	3,080		EPS	1.5	4.1	10.7	4.5
<b>Post Issue Shareholding Pattern</b>			ROCE	16%	27%	43%	-
Promoters	46.4%		EV/Sales	23.6	19.8	13.7	-
Public	53.6%		EV/EBITDA	121.2	71.7	33.3	-
<b>Offer structure for different categories</b>			P/E	394.1	144.2	54.6	-
QIB (Including Mutual Fund)	50%		<i>Source: Company data, NBRR</i>				
Non-Institutional Investors	15%						
Retail	35%						
Post Issue Equity (Rs. in Cr)	10.377						
Issue Size (Rs in Cr)	588						
Face Value (Rs)	2						
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### Company Background

Data Patterns (DP) is one of the few integrated defence and aerospace electronics solutions provider catering to the indigenously developed defence products industry. DP has proven in-house design and development capabilities and experience of more than three decades (including through its erstwhile subsidiary) in the defence and aerospace electronics space.

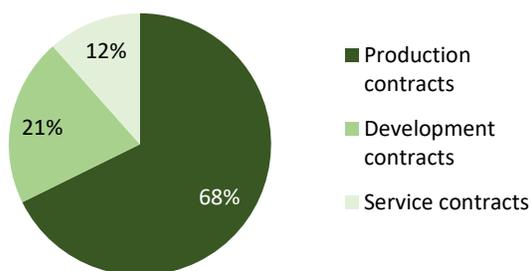
DP has design capabilities across the entire spectrum of strategic defence and aerospace electronics solutions including processors, power, radio frequencies (RF) and microwave, embedded software and firmware and mechanical engineering. Its core competencies include electronic hardware design and development, software design and development, firmware design and development, mechanical design and development, product prototype design and development, functional testing and validation, environment testing and verification and engineering services opportunities. **DP's capabilities across electronics solutions from design to delivery allows it significant advantage in terms of overall development time and cost and also allows it to offer competitive pricing when bidding for defence and aerospace projects.**

**Platform specific products and products certified for ongoing programmes allows DP to be the preferred OEM supplier for such qualified product requirements, driving growth and revenue visibility over many years.** DP's design and development capabilities have allowed it to develop complete systems as well as sub-systems for various strategic defence and aerospace electronics solutions. These systems have found applications on various platforms and programmes such as the Tejas Light Combat Aircraft ("LCA"), the Light Utility Helicopter ("LUH"), BrahMos missile programme, precision approach radars and various communications intelligence ("COMINT") and electronic intelligence ("ELINT") systems.

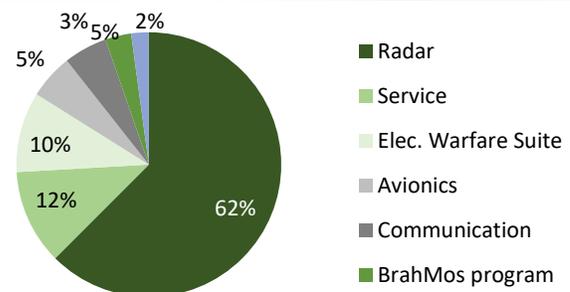
DP has invested in and developed a reusable building block model leading to capabilities across various product domains. This approach has allowed it to achieve better margins due to spreading out of development costs over multiple programmes, in addition to saving on development time for new products. Several of its existing products or their component modules or building blocks are pre-approved by its customers, especially defence-sector public sector undertakings (DPSUs) and government ministries and departments, also allowing it the benefit of reduced lead times for development of new products.

With an order book of Rs. 581 Cr as on Sep, 2021, which has increased from Rs. 179 Cr as on Mar, 2018 to Rs. 498 Cr as on Mar, 2021 at a CAGR of 41%, indicating a scalable business model. DP expects order book to keep increasing as it faces limited indigenous competition, and high entry barriers due to the development and qualification cycle of both, product and platform. The orders in hand reflect products that have progressed from the development to production phase, thereby enabling rapid growth of turnover and profits. Further, 15% of its revenue in FY21 was contributed by global clients.

**Order Book Mix (Contract-wise)**



**Order Book Mix (Product-wise)**



Source: RHP



### Investment Rationale

**Integrated and strategic defence and aerospace electronics solutions provider which is well positioned to benefit from the Make in India opportunity**

With DPSUs focussing on specialisation; and integration & subcomponent manufacturing being outsourced to the private industry, there are resultant expanded opportunities for the private sector. DP’s focus on building complete systems from the building blocks and sub-systems already developed, provides a higher value addition while distributing development costs. DP is focussed on developing complete systems and sub-system solutions in domains such as radars, electronic warfare, communication systems, RF and microwave, avionics, missile and torpedo electronics, fire and launch control systems, space based systems and automatic test equipment.

Driven by defence policies and government initiatives that are more predisposed towards procuring equipment from the private sector, companies like DP that already have strong business relationships with DPSUs, DRDO and larger private defence companies, as well as the R&D and manufacturing capability to build end-to-end solutions are likely to emerge as winners.

### Solutions indigenously designed and developed by DP



*Indigenously developed fire control system for the BrahMos missile programme*



*Designed and developed the second launch pad countdown system for delivery to the Indian government space organization*



*Designed and developed Primary Surveillance Radar for coastal surveillance for the Indian government space organization*



*Developed Seaking automated test equipment for INS Shikra*



*Laser guided bomb kit tester*



*Satellite bus management system*



*Digital flight control computer*

Source: RHP

### Superior business positioning

DP is well positioned to capture the evolving opportunities in the defence sector with DPSUs vacating the development and integration works to accommodate more private players. DP’s capabilities stand well differentiated because the company has 100% in house design, development and manufacturing capabilities across segments. Its past track record of building technologically complex products for DRDO and DPSUs have given the company a foundation to build its own products.

DP offers products catering to the entire spectrum of aerospace and defence platforms including space, air, land and sea. The company has end-to-end capabilities to build and deliver complete systems, with their design and manufacturing capabilities being completely in-house.

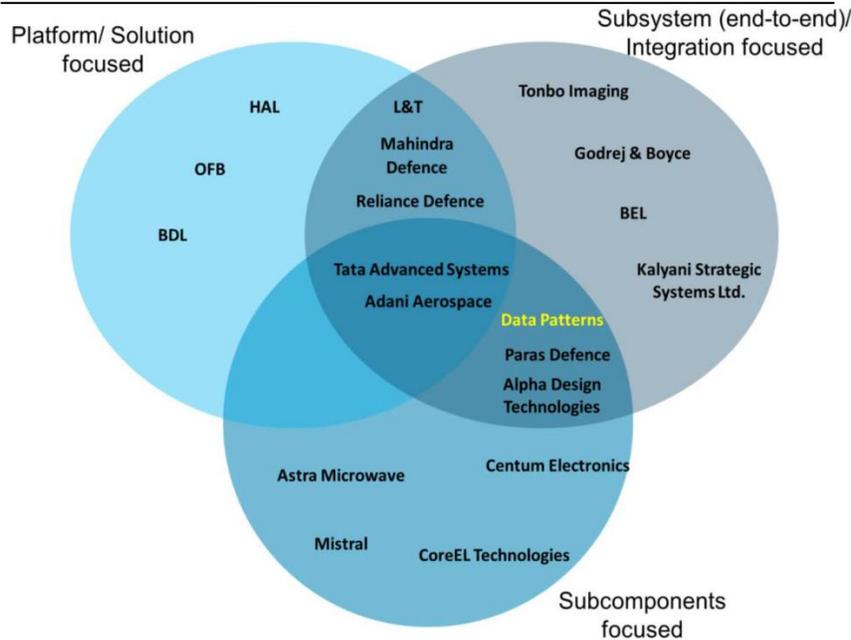
### Product capability comparison of Indian private defence companies

■ = High level capability     
 ■ = Mid level capability     
 ■ = No capability

Company	Radars - Tracking & Surveillance	Radars - Multimission	Radars - Specialized (Stealth Detection etc.)	Seekers and Electronics for Missiles/ Torpedoes/ Sonbuoys	EW	Communi- cations and SDR	Satcom	Ground Stations	Fire Control Systems	Avionics	Nano and Micro Satellites	Testing
Data Patterns	High	High	High	High	High	High	High	High	High	High	High	High
L&T (Defence Engineering Revenues)	High	High	No	Mid	No	No	No	No	High	No	No	No
BEL	High	High	No	Mid	No	No	No	No	High	No	No	No
Paras Defence	High	High	No	Mid	No	No	No	No	High	No	No	No
Mahindra Defence Systems	High	High	No	Mid	No	No	No	No	High	No	No	No
Tata	High	High	No	Mid	No	No	No	No	High	No	No	High
Astra Microwave Products	High	High	No	Mid	No	No	No	No	High	No	No	No
Godrej & Boyce	High	High	No	Mid	No	No	No	No	High	No	No	No
Centum Electronics	High	High	No	Mid	No	No	No	No	High	No	No	No
Alpha Design Technologies	High	High	No	Mid	No	No	No	No	High	No	No	No
Adani Aerospace & Defence Ltd.	High	High	No	Mid	No	No	No	No	High	No	No	No
CoreEI Technologies	High	High	No	Mid	No	No	No	No	High	No	No	No
Mistral Solutions	High	High	No	Mid	No	No	No	No	High	No	No	No

Source: RHP

### Indian defence suppliers - anticipated future positioning

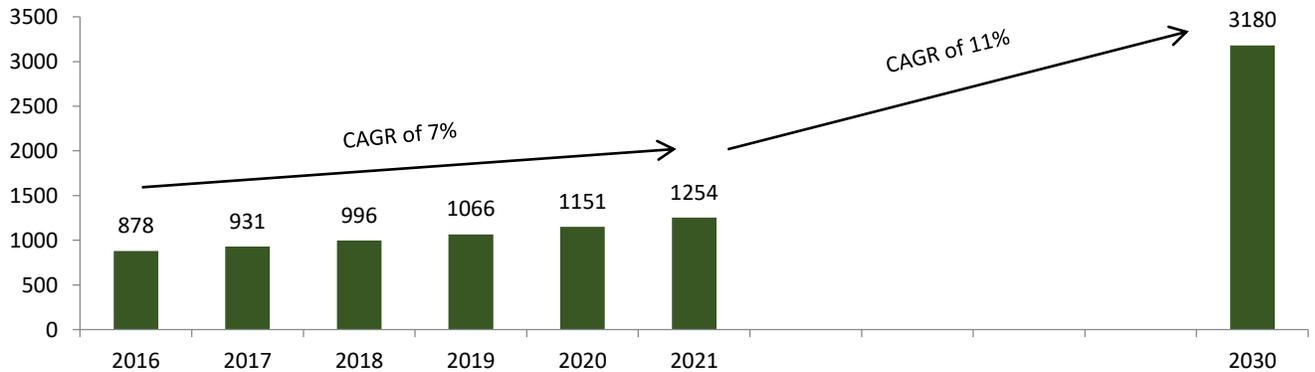


Source: RHP

### Indian military radar market to grow at ~11% CAGR till 2030

Indian military radar (62% of DP's order book) market stands at USD 1.25 Bn in 2021 and is expected to reach USD 3.18 Bn by 2030 growing at a CAGR of 11%. This presents a large opportunity considering DP's order book base for radars is at Rs. 364 Cr.

Military Radar Market (in USD Mn)

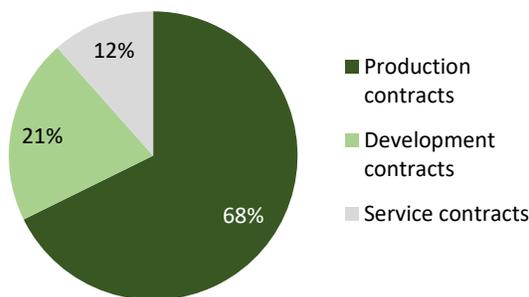


Source: Frost & Sullivan

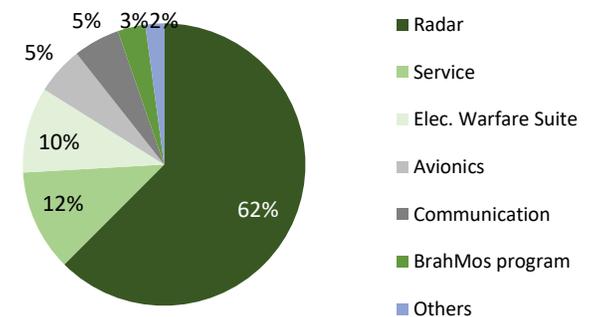
### Strong order book and pipeline

As on Sep 2021, DP had an order book of Rs. 581 Cr (executable in next 2 years), including orders from the Indian government defence ministry, BrahMos, DRDO, the Indian government space organisation, HAL, BEL and a DPSU involved in the missile space. DP is engaged in the supply of products to several prestigious defence projects in India, including the LCA (Light Combat Aircraft), the HAL Dhruv, LUH (Light Utility Helicopters) and the BrahMos missile programme. Due to diversification of products and services over the years, backed by design and development capabilities, **DP has grown its order book from Rs. 81 Cr as on FY17 to Rs. 581 Cr, as on Sep, 2021. The company is expected to be a major participant in at least Rs. 1500 Cr worth of contracts in the next 3 years.**

Order book mix - Contract wise



Order Book Mix – Product wise



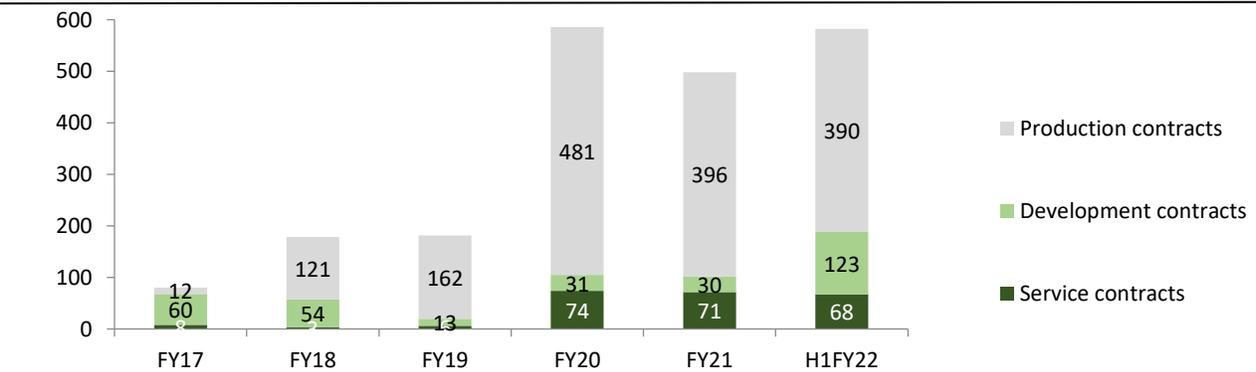
Source: RHP

## Data Patterns (India) Ltd.

### Transition from development stage to production stage resulting in an increase in return ratios

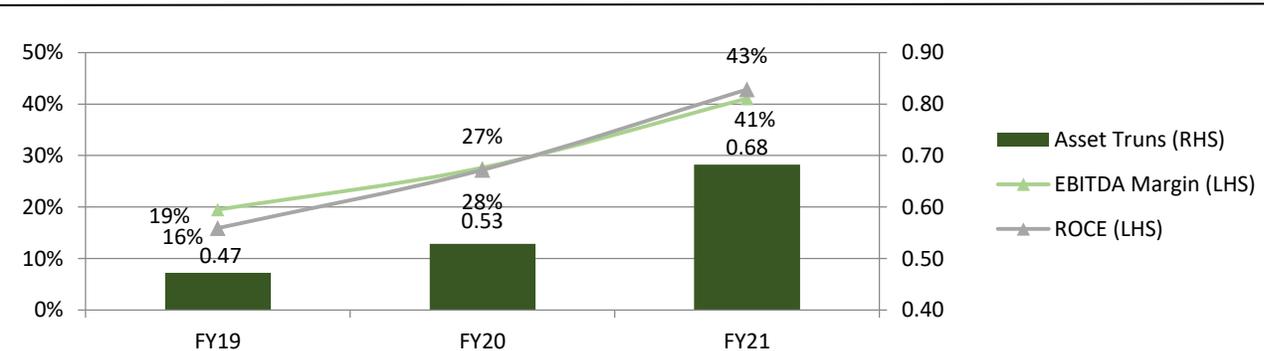
Since its initial days, the company focused on development of defence products and solutions rather than merely component manufacturing. Developing own products is a long gestation business. During the development stage, the expenses are as high as the revenue and thus financials remained subdued for the company historically. However, over the last five years, DP has transitioned from the developmental stage to production stage. As reflected in the order book below, the production contracts have increased from just Rs. 12 Cr in FY17 to Rs. 390 Cr in Sep 2021. As the revenue mix of production contracts keeps rising, the margins, asset turns and ROCE shall keep increasing.

#### Order book over last 5 years



Source: RHP

#### Improvement in profitability ratios



Source: RHP

**Data Patterns (India) Ltd.**
**Concerns**

**Competition:** Most of the system level products delivered to DRDO or the Indian government space organisation are on single vendor basis, though the initial sub-system/component level contracts may have been obtained through a tender process based on lowest quote basis. Competition is mainly from companies like L&T, BEL, Mahindra Defense Systems, Astra Microwave Products, Alpha Design Technologies, Mistral Solutions, CoreEI Technologies and others.

**High dependence on GOI at 53% of FY21 revenue:** A decline or reprioritisation of the Indian defence budget, reduction in orders, termination of existing contracts, delay of payments could have a material impact on the company's financials.

**Business needs high working capital:** As majority of the revenue accrues from GOI, the receivables and inventory for DP are elevated at 254 days and 120 days respectively leading to an elongated working capital cycle of 339 days. This has led to mediocre EBITDA – to - operating cash flow conversion at 54% over the last 3 years.

**Covid led restrictions could impact the business in the short run:** Any disruptive situation such as re-introduction of lockdowns due to Covid-19 would impact business continuity and is likely to lead to impact revenue and profitability.

**Valuation and Recommendation**

DP is a proxy play on India's indigenization of defence products. With strong capabilities across segments, robust order book of Rs. 581 Cr (2.6x FY21 revenue) and an order pipeline of Rs. 1500 Cr, DP is on track to deliver good growth in coming years. Even on historical basis, we note that it's growth has outperformed listed peers. Higher margins more than compensates for the lengthy working capital cycle resulting in satisfactory cash flow based ROCE (pre-tax cash flow from operations / capital employed - at 36% over FY19-21). **We recommend investors to subscribe to the issue for listing gains as well as from a long term perspective.**

**Listed Private Defence Players**

FY21 Figures	Midhani	Astra Micro	Apollo Micro	Avantel	Centum Elec.	Paras	AVG.	Data Patterns
Revenue	813	641	203	78	817	143	449	224
CAGR (FY17-21)	1%	13%	0%	23%	4%	6%	8%	46%
Order Book / Revenue	1.7	2.7	NA	NA	1.2	2.1	1.9	2.6
EBITDA Margin	30.3%	12.0%	19.2%	28.6%	10.8%	30.3%	21.9%	41.1%
Asset Turns (x)	0.7	0.9	0.5	1.2	1.4	0.4	0.8	0.7
Wkg Cap Days	105	283	575	42	123	387	253	339
Pretax CFO/EBITDA (FY19-21)	131%	3%	1%	120%	99%	8%	60%	54%
Pretax CFO/Cap Emp (FY19-21)	25%	0%	0%	38%	15%	1%	13%	36%
ROCE (PBIT/Cap Emp)	19%	10%	7%	30%	8%	11%	14%	43%
ROE	15%	5%	3%	23%	8%	8%	10%	27%
EV/Sales	4.4	3.6	1.6	3.6	1.3	19.7	5.7	13.7
EV/EBITDA	14.6	29.6	9.3	12.8	11.7	64.1	23.7	33.3
P/E	20.9	77.5	22.7	20.1	43.2	140.4	54.1	54.6

Source: RHP, NBRR

## Data Patterns (India) Ltd.

## Financials

P&L (Rs. Cr)	FY19	FY20	FY21	H1FY22
Net Revenue	131	156	224	96
<b>% Growth</b>		19%	43%	117%
<b>COGS</b>	49	56	70	21
<b>% of Revenues</b>	37%	36%	31%	22%
Employee Cost	38	42	48	28
<b>% of Revenues</b>	28.7%	27.1%	21.6%	29.2%
Other expenses	19	15	13	9
<b>% of Revenues</b>	14.4%	9.3%	5.9%	9.8%
<b>EBITDA</b>	26	43	92	38
<b>EBITDA Margin</b>	19.5%	27.6%	41.1%	39.2%
Depreciation	6	5	6	3
Other Income	1	4	3	1
Interest	11	13	15	5
<b>PBT</b>	10	28	75	31
Tax	3	7	19	8
<b>Tax rate</b>	26%	26%	25%	25%
<b>PAT</b>	8	21	56	23
<b>% Growth</b>		173%	164%	NA
<b>EPS (Post Issue)</b>	1.5	4.1	10.7	4.5

Ratios & Others	FY19	FY20	FY21	H1FY22
EBITDA Margin (%)	19.5%	27.6%	41.1%	39.2%
PAT Margin (%)	5.9%	13.5%	24.8%	24.1%
ROE (%)	6%	14%	27%	-
ROCE (%)	16%	27%	43%	-

Turnover Ratios	FY19	FY20	FY21	H1FY22
Debtors Days	287	270	254	-
Inventory Days	241	186	120	-
Creditor Days	44	40	20	-
Asset Turnover (x)	0.5	0.5	0.7	-

Valuation Ratios	FY19	FY20	FY21	H1FY22
Price/Earnings (x)	394.1	144.2	54.6	-
EV/EBITDA (x)	121.2	71.7	33.3	-
EV/Sales (x)	23.6	19.8	13.7	-
Price/BV (x)	22.8	19.8	14.6	-

Source: Company Data, NBRR

Balance Sheet (Rs. Cr)	FY19	FY20	FY21	H1FY22
Share Capital	1.7	1.7	1.7	9.3
Reserve & Surplus	131	152	206	207
<b>Networth</b>	<b>133</b>	<b>153</b>	<b>208</b>	<b>217</b>
<b>Total Loans</b>	<b>60</b>	<b>62</b>	<b>33</b>	<b>52</b>
Other non-curr liab.	31	18	30	16
Trade payable	16	17	12	10
Deferred Tax Liability (Ne	1	1	1	1
Provisions	6	7	9	10
Current tax Liabilities	1	6	5	12
Other curr liab.	29	31	30	38
<b>Total Equity &amp; Liab.</b>	<b>277</b>	<b>295</b>	<b>328</b>	<b>356</b>
Fixed Assets & CWIP	36	33	33	41
Inventories	87	79	74	87
Other non cur fin assets	39	46	34	60
Cash & Bank	0	2	9	8
Debtors	103	116	156	135
Other Financial Assets	0	4	5	6
Other Current assets	12	15	18	20
<b>Total Assets</b>	<b>277</b>	<b>295</b>	<b>328</b>	<b>356</b>
Cash Flow (Rs. Cr)	FY19	FY20	FY21	H1FY22
EBITDA	26	43	92	38
Provisions & Others	-	1	0	0
<b>Op. profit before WC</b>	<b>26</b>	<b>45</b>	<b>92</b>	<b>38</b>
Change in WC	(29)	(28)	(18)	(48)
Less: Tax	(1)	(3)	(19)	(0.3)
<b>CF from operations</b>	<b>(4)</b>	<b>13</b>	<b>55</b>	<b>10</b>
Addition to assets	(1)	(1)	(6)	(11)
(Purchase)/Sale of invst.	0	0	1	
Interest Received	1	3	2	1
<b>CF from Investing</b>	<b>0</b>	<b>1</b>	<b>(3)</b>	<b>(10)</b>
Proceeds/(Repayment)	15	2	(28)	19
Lease Liability payment	(2)	(2)	(2)	(1)
Interest & Dividend paid	(11)	(14)	(15)	19
<b>CF from Financing</b>	<b>2</b>	<b>(14)</b>	<b>(45)</b>	<b>(1)</b>
<b>Net Change in cash</b>	<b>(2)</b>	<b>1</b>	<b>7</b>	<b>(1)</b>
Cash at beginning	2	0	2	9
Cash at end	0	2	9	8

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