

As filed with the Securities and Exchange Commission on April , 2026

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Arbe Robotics Ltd.

(Exact name of registrant as specified in its charter)

<p style="text-align: center;">Israel (State or Other Jurisdiction of Incorporation or Organization)</p> <p style="text-align: center;">Arbe Robotics Ltd. HaHashmonaim St. 107 Tel Aviv-Yafo Israel</p> <p style="text-align: center;">(Address of Principal Executive Offices)</p>	<p style="text-align: center;">Not Applicable (IRS Employer Identification No.)</p> <p style="text-align: center;">Not Applicable (Zip Code)</p>
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Arbe Robotics Ltd. 2021 Equity Incentive Plan

(Full Title of the Plan)

Cogency Global Inc.
122 East 42nd Street, 18th Floor
New York, NY 10168

(Name and address of agent for service)

(212) 947-7200

(Telephone number, including area code, of agent for service)

With copies to:

Shay Dayan, Adv.
Lior Etgar, Adv.
Erdinast, Ben Nathan, Toledano & Co.
with Hamburger Evron
4 Berkowitz Street
Tel Aviv, 6423806, Israel
+972 (3)-7770111

Richard Anslow, Esq.
Jonathan Deblinger, Esq.
Asher S. Levitsky PC.
Ellenoff Grossman & Schole LLP
1345 Avenue of the Americas, 11th Floor
New York, NY 10105
Phone: (212) 370-1300

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934 (the "Exchange Act").

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

On January 13, 2023, Arbe Robotics Ltd. filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-8 (File No. 333-269230) (the "Prior Registration Statement") to register under the Securities Act of 1933, as amended (the "Securities Act")

The Arbe Robotics Ltd. 2021 Equity Incentive Plan (the "2021 Plan") provides that the number of ordinary shares available for issuance under the 2021 Plan will increase on the first day of each calendar year, by such number of ordinary shares as the Board may determine, provided that in the absence of such determination, the increase shall equal 5% of the total number of ordinary shares outstanding on December 31 of the immediately preceding calendar year. In accordance with General Instruction E to Form S-8, the Registrant is filing this registration statement on Form S-8 solely to register an additional 3,534,973 ordinary shares for issuance under the 2021 Plan, pursuant to the provisions of the 2021 Plan which provide for annual increases in the number of ordinary shares reserved for issuance under the 2021 Plan. Pursuant to General Instruction E to Form S-8, the contents of the Prior Registration Statements are hereby incorporated by reference in its entirety, with the exception of Items 3 and 8 of Part II of the Prior Registration Statements, each of which is amended and restated in its entirety herein.

PART I**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS****Item 1. Plan Information.*****Item 2. Registrant Information and Employee Plan Annual Information.***

* Information required by Part I to be contained in the Section 10(a) Prospectus is omitted from the Registration Statement in accordance with Rule 428 under the Securities Act.

PART II**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT****Item 3. Incorporation of Documents by Reference**

This registration statement incorporates by reference the documents set forth below that have previously been filed with the SEC:

This prospectus incorporates by reference the documents set forth below that have previously been filed with the SEC:

1. Our annual report on [Form 20-F](#) for the year ended December 31, 2025, which was filed with the SEC on March 28, 2026 (the “2025 Annual Report”);
2. Our report on [Form 6-K](#), including Exhibit 99.1, which was filed with the SEC on April 17, 2026.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, including all such documents we may file with the SEC after the effective date of this registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this registration statement and deemed to be part of this prospectus from the date of the filing of such reports and documents, and any information furnished to the SEC shall only be incorporated by reference to the extent that such material is expressly incorporated in registration statements filed by the Company on Form S-3 or Form S-8.

Item 8. Exhibits

Exhibit No.	Description
4.1*	2021 Share Incentive Plan⁽¹⁾
5.1	Opinion of Erdinast, Ben Nathan, Toledano & Co.
23.1	Consent of Somekh Chaikin Member Firm of KPMG International
23.2	Consent of Erdinast, Ben Nathan, Toledano & Co. (included in Exhibit 5.1)
107	Computation of Registration Fee

* Indicates a management contract or compensation plan.

(1) Filed as an exhibit to the issuer’s registration statement on Form F-1, File No. 333-259757, .and incorporated herein by reference

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Tel Aviv-Yafo, Israel, on the 23th day of April, 2026

Arbe Robotics Ltd.

By: /s/ Ram Machness
 Ram Machness
 Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below does hereby constitute and appoint Ram Machness and Karine Pinto-Flomenboim, each acting alone, as his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ Ram Machness</u> Ram Machness	Chief Executive Officer (Principal Executive Officer)	April 23, 2026
<u>/s/ Karine Pinto-Flomenboim</u> Karine Pinto-Flomenboim	Chief Financial Officer (Principal Financial and Accounting Officer)	April 23, 2026
<u>/s/ Yair Shamir</u> Yair Shamir	Director	April 23, 2026
<u>/s/ Jacob (Kobi) Marinka</u> Jacob (Kobi) Marinka	Director	April 23, 2026
<u>/s/ Boaz Schwartz</u> Boaz Schwartz	Director	April 23, 2026
<u>/s/ Noam Arkind</u> Noam Arkind	Director	April 23, 2026
<u>/s/ E. Scott Crist</u> E. Scott Crist	Director	April 23, 2026
<u>/s/ Yonina Eldar</u> Yonina Eldar, Ph.D.	Director	April 23, 2026
<u>/s/ Thilo Koslowski</u> Thilo Koslowski	Director	April 23, 2026
<u>/s/ Chris Van Dan Elzen</u> Chris Van Dan Elzen	Director	April 23, 2026

AUTHORIZED U.S. REPRESENTATIVE

Pursuant to the Securities Act of 1933, as amended, the undersigned, the duly authorized representative in the United States of Arbe Robotics Ltd. has signed this registration statement in the city of New York, New York on the 23 day of April, 2026.

Authorized Representative in the United States

— Cogency Global Inc.

By: /s/ Colleen A. De Vries

Name: Colleen A. De Vries

Title: Senior Vice President on behalf of Cogency Global Inc.

Exhibit 5.1



Museum Tower, 4 Berkowitz St., Tel-Aviv 6423806, Israel · T. +972.3.7770111 · F. +972.3.7770101 · ebnlaw.co.il

April 23, 2026

Arbe Robotics Ltd.
107 HaHashmonaim St.
Tel Aviv-Yafo
Israel

Ladies and Gentlemen,

We have acted as Israeli counsel to Arbe Robotics Ltd., a company organized under the laws of the State of Israel (the “Company”), in connection with the filing by the Company of a registration statement on Form S-8 on or about April 23, 2026 (the “Registration Statement”) under the Securities Act of 1933, as amended (the “Securities Act”), relating to the registration of 3,534,973 ordinary shares of the Company, par value NIS 0.000216 (the “Ordinary Shares”), issuable under the Arbe Robotics Ltd. 2021 Equity Incentive Plan (the “Plan”, and the “Shares”, respectively).

In rendering the opinion set forth below, we have examined solely copies of: (i) the Articles of Association of the Company, as currently in effect; (ii) the Plan, (iii) resolutions of the board of directors of the Company; and (iv) such other corporate records, agreements, registration statements, documents and other instruments, and such certificates or comparable documents of public officials and of officers of the Company as we have deemed relevant and necessary as a basis for the opinions hereafter set forth. Insofar as the opinions expressed herein involve factual matters, we have relied exclusively, without independent investigation or verification, upon certificates of, and other communications with, officers of the Company. We have also made inquiries of such officers, and such examinations of Israeli laws as we have deemed relevant and necessary in order to enable us to express the opinions hereinafter set forth.

In making the examination described above, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity, conformity and completeness of all documents submitted to us and the legal capacity and due authenticity of all persons executing such documents. We have assumed the same to have been properly given and to be accurate, we have assumed the veracity of all facts communicated to us by the Company and its officers, and we have assumed that all consents, resolutions and minutes of meetings of the Company’s board of directors which have been provided to us are complete, true and accurate, have been properly prepared in accordance with the Company’s incorporation documents and all applicable laws and that there are no additional contrast consents, resolutions and minutes which have not been presented to us.

The opinions set forth herein are subject to the following exceptions, limitations and qualifications: (i) the effect of bankruptcy, insolvency, reorganization, fraudulent conveyance and transfer, moratorium or other similar laws now or hereafter in effect relating to or affecting the rights and remedies of creditors and secured parties; (ii) the effect of general principles of equity, whether applied in a proceeding in equity or at law, including without limitation, concepts of materiality, reasonableness, good faith and fair dealing, and the possible unavailability of specific performance, injunctive relief or other equitable remedies; (iii) the exercise of judicial or administrative discretion; (iv) the unenforceability under certain circumstances under law or court decisions of provisions providing for the indemnification of, or contribution to, a party with respect to a liability where such indemnification or contribution is contrary to public policy; and (v) the effect of statutes of limitations.

Based upon the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that, the Shares being registered pursuant to the Registration Statement, when issued and paid for in accordance with the respective Plan, in accordance with the Registration Statement and, as the case may be, pursuant to the terms of the agreements and awards that have been or may be granted under the respective Plan, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to matters governed by the laws of the State of Israel, and we express no opinion with respect to the laws of any other country, state or jurisdiction or with respect to any matter governed by such laws. This opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, in respect of any other matters.

The opinions set forth herein are made as of the date hereof and are subject to, and may be limited by, future changes in the factual matters set forth herein, and we undertake no duty to advise you of any such changes or to update our opinions.

The opinions expressed herein represent the judgment of this law firm as to the legal matters addressed herein but they do not constitute guarantees or warranties as to how a court may rule on such matters and should not be construed as such.

This opinion is governed shall be exclusively governed by the laws of the State of Israel under all and any circumstances, and under all and any proceedings shall be determined exclusively by the competent courts in the city of Tel Aviv, Israel. This opinion is rendered to you subject to, based and in reliance on your agreement to comply with the exclusive choice of law and jurisdiction contained herein and to refrain under all and any circumstances from initiating any proceedings or taking any legal action relating to this opinion outside the State of Israel.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving this opinion, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act, the rules and regulations of the Securities and Exchange Commission promulgated thereunder, or Item 509 of the SEC's Regulation S-K promulgated under the Securities Act.

Very truly yours,

Erdinast, Ben Nathan, Toledano & Co.

Exhibit 23.1**Consent of Independent Registered Public Accounting Firm**

We consent to the use of our report dated March 27, 2026, with respect to the consolidated financial statements of Arbe Robotics Ltd., incorporated herein by reference.

/s/ Somekh Chaikin

Somekh Chaikin

Member Firm of KPMG International

Tel Aviv, Israel

April 23, 2026

Ex-Filing Fees

CALCULATION OF FILING FEE TABLES

S-8

Arbe Robotics Ltd.

Table 1: Newly Registered Securities

Security Type	Security Class Title	Notes	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Ordinary shares, par value NIS 0.000216 per share	(1)	457(a)	3,534,973	\$ 0.8353	\$ 2,952,762.95	0.0001381	\$ 407.78
						Total Offering Amounts:	\$ 2,952,762.95	407.78
						Total Fee Offsets:		0.00
						Net Fee Due:		<u>\$ 407.78</u>

Offering Note(s)

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) based on the closing price on April 17, 2026 (\$0.8353 per share). Pursuant to Rule 416 under the Securities Act, this registration statement also includes any additional ordinary shares that shall become issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.