API Spec 11B

Public Data Reference Summary

Sucker Rods and Rod-related Products | 28th Edition + Addendum 1

Purpose	A concise, data-first dossier built from publicly available API catalog information, API 11B addendum notices, and current API-compliant public product data sheets. This file is intended for technical orientation and pre-quotation review.
Important limitation	The full normative API Spec 11B text is a purchased, copyrighted standard. This PDF intentionally summarizes only public data points and does not reproduce the complete proprietary tables, figures, tolerances, or gauge drawings.

Included public datasets

- API publication identity, edition status, effective date, page count, and 2025 addendum notes.
- Public scope summary for products and functions covered by API Spec 11B.
- Current public API-compliant rod sizes, nominal lengths, grade chemistry, minimum mechanical properties, and maximum pulling-force data.
- Current public API-compliant sucker rod coupling dimensions, inspection note, and order-entry fields.
- A final source-basis page so the numbers can be checked back to the original public documents.

Prepared in English for client-ready technical use. Main style preference: blue, restrained, data-heavy, and easy to forward as a quick standard reference.

1. Standard status and public scope

Field	Publicly available data
Document	API Specification 11B
Title	Sucker Rods and Rod-related Products
Current edition in API 2025 catalog	28th Edition
Publication date	December 2023
Effective date	December 12, 2024
Page count	188 pages

Public scope summary from the API 2025 publications catalog

Covered product / function
Thread form requirements
Steel sucker rods and pony rods
FRP sucker rods and pony rods
Sinker bars
Polished rods
Couplings and sub-couplings
Thread gauges
Pumping tees
Stuffing boxes
Polished rod clamps
Calibration of measuring equipment
Standard methods of mechanical-properties testing
Polished rod liners

Why this matters: API 11B is not only a rod-size document. Its public catalog scope shows that it reaches into threads, gauges, couplings, care-and-measurement interfaces, and mechanical-property test methods used across the sucker-rod lift system.

2. Revision watch and related API documents

Addendum 1 topic	Publicly available note
Issue date	September 2025
Monogram effective date	April 1, 2026
Deleted variables	DTCB, LTCB
Added variables	DTPC, SB4
Added gauge symbols	B4LI, P3LI
Thread sections revised	B.3.4 polished rod pin threads; B.3.5 polished rod box threads

Related document	Publicly available note
Related API document	RP 11BR - Recommended Practice for the Care and Handling of Sucker Rods
Edition / status	9th Edition, August 2008; reaffirmed July 2020
Public catalog scope note	Selection, allowable stress, proper joint makeup, corrosion control, and used rod inspection

Practical read-through: the September 2025 addendum is thread- and gauge-oriented. The published changes focus on variable names, added gauge symbols, and revised polished-rod pin/box thread sections, which is important when drawings, gauges, or acceptance language are being cross-checked against the latest revision set.

3. Public API-compliant rod reference data

Item	Current public data
Nominal sucker rod sizes	5/8", 3/4", 7/8", 1", 1 1/8"
Nominal sucker rod lengths	25 ft, 30 ft (7.62, 9.14 m)
Nominal pony rod lengths	2, 4, 6, 8, 10, 12 ft (0.61, 1.22, 1.83, 2.44, 3.05, 3.66 m)
Grade availability note	Different steel grades available depending on load type and corrosion level; grades C, K and DC carbon available under special request

Ordering / product-sheet note	Current public data
Public order-entry fields shown in current API-compliant PDS	Product Family, Diameter, Grade, Length
Pump systems noted	Beam pumping and progressive cavity pumping
Quality-system statement on PDS	Manufactured under a quality assurance system stated to comply with ISO 9001 and API Q1

Use note: these rows are drawn from a current API-compliant public data sheet rather than the proprietary full standard. They are suitable for sizing discussions, quotation scoping, and document-pack review, but not as a replacement for the full normative API thread / gauge detail.

4. Public grade chemistry and minimum mechanical properties

Grade	C	Mn	Si	S	P	Cr	Ni	Mo	Others
C Carbon	0.30-0.36	1.30-1.60	0.20-0.40	0.035 max	0.035 max	0.20 max	0.15 max	0.05 max	V: 0.15 max
K Alloy	0.18-0.25	0.70-0.90	0.15-0.35	0.035 max	0.035 max	0.30 max	1.65-2.00	0.20-0.30	-
DC Carbon	0.30-0.36	1.30-1.60	0.20-0.40	0.035 max	0.035 max	0.20 max	0.15 max	0.05 max	V: 0.15 max
DA Alloy	0.40-0.45	0.75-1.00	0.15-0.35	0.025 max	0.025 max	0.80-1.10	0.25 max	0.15-0.25	-
DS Special	0.29-0.37	0.70-0.95	0.15-0.35	0.025 max	0.025 max	0.80-1.40	1.20-2.00	0.15-0.30	V: 0.04-0.08
KDS Special	0.20-0.25	0.80-1.00	0.15-0.35	0.025 max	0.025 max	0.70-0.90	1.15-1.50	0.25-0.30	V: 0.03-0.07

Grade	Yield Strength (0.2% offset)	Ultimate Tensile Stress	Elongation (8")	Reduction of area	Hardness
C Carbon	min 60 kpsi (min 414 MPa)	90 to 115 kpsi (621 to 793 MPa)	13% min	40% min	-
K Alloy	min 60 kpsi (min 414 MPa)	90 to 115 kpsi (621 to 793 MPa)	13% min	40% min	-
DC Carbon	min 85 kpsi (min 586 MPa)	115 to 140 kpsi (793 to 965 MPa)	10% min	40% min	-
DA Alloy	min 95 kpsi (min 655 MPa)	120 to 140 kpsi (827 to 965 MPa)	10 % min	45% min	27 HRC
DS Special	min 100 kpsi (min 689 MPa)	125 to 140 kpsi (862 to 965 MPa)	10 % min	45% min	28 HRC
KDS Special	min 85 kpsi (min 586 MPa)	115 to 140 kpsi (793 to 965 MPa)	10% min	45% min	25 HRC

Interpretation note: the public sheet distinguishes carbon, alloy, and special grades and publishes minimum yield strength, UTS range, elongation, reduction of area, and hardness where applicable. These are useful pre-order screening values; actual certification review still needs the mill release documents for the ordered grade.

5. Public performance and coupling data

Maximum pulling force from a current public API-compliant sucker- and pony-rod data sheet

Grade	5/8 in	3/4 in	7/8 in	1 in	1 1/8 in
C Carbon	15.8 klb (7.2 t)	22.8 klb (10.4 t)	31.3 klb (14.2 t)	40.9 klb (18.6 t)	51.8 klb (23.5 t)
K Alloy	15.8 klb (7.2 t)	22.8 klb (10.4 t)	31.3 klb (14.2 t)	40.9 klb (18.6 t)	51.8 klb (23.5 t)
DC Carbon	22.4 klb (10.2 t)	32.3 klb (14.7 t)	44.3 klb (20.1 t)	57.8 klb (26.3 t)	73.3 klb (33.3 t)
DA Alloy	25 klb (11.4 t)	36.1 klb (16.4 t)	49.5 klb (22.5 t)	64.6 klb (29.4 t)	81.9 klb (37.2 t)
DS Special	26.3 klb (12 t)	38 klb (17.3 t)	52.1 klb (23.7 t)	68 klb (30.9 t)	86.1 klb (39.2 t)
KDS Special	22.4 klb (10.2 t)	32.3 klb (14.7 t)	44.3 klb (20.1 t)	57.8 klb (26.3 t)	73.3 klb (33.3 t)

The same public sheet states that, to prevent tensile failures, weight-indicator pull on a "like new" rod string should not exceed 90% of the specified minimum yield strength of the smallest-diameter rod in the string.

Full-size coupling nominal size	OD in	OD mm	Lc min in	Lc min mm	Lwfa in	Weight lb	Weight kg
5/8"	1.500	38.1	4.000	101.6	1.252	1.17 lb	0.530 kg
3/4"	1.625	41.3	4.000	101.6	1.252	1.4 lb	0.633 kg
7/8"	1.811	46.0	4.000	101.6	1.252	1.72 lb	0.781 kg
1"	2.189	55.6	4.000	101.6	1.500	2.67 lb	1.209 kg
1 1/8"	2.375	60.3	4.500	114.3	1.500	3.29 lb	1.494 kg

Slim-hole coupling nominal size	OD in	OD mm	Lc min in	Lc min mm	Lwfa in	Weight lb	Weight kg
5/8"	1.252	31.8	4.000	101.6	-	0.66 lb	0.300 kg
3/4"	1.500	38.1	4.000	101.6	-	1.05 lb	0.478 kg
7/8"	1.626	41.3	4.000	101.6	-	1.14 lb	0.519 kg
1"	2.000	50.8	4.000	101.6	-	1.95 lb	0.883 kg
1 1/8"	2.258	57.4	4.500	114.3	-	2.74 lb	1.244 kg

Public coupling note: the current API-grade coupling sheet states that all dimensions comply with API 11B except the OD in the 1 1/8 in slim-hole size.

6. QC, order-entry fields, and source basis

Check point	Publicly available detail
Public NDT note on coupling sheet	All raw material is carefully inspected using electromagnetic and/or ultrasonic methods to ensure soundness of the final product.
Public coupling order-entry fields	PDS, coupling type, nominal dimension, size, grade
Public rod order-entry fields	PDS, product family (sucker rod or pony rod), diameter, grade, length
Why this matters in practice	For quotation and release review, API 11B work often fails not on the headline grade but on dimension family, thread / coupling match, tally completeness, and traceability consistency across the shipment.

Source basis	What was taken from it
API 2025 Publications Catalog - Exploration and Production section	Public catalog entry confirming Spec 11B title, edition, scope, page count, and effective date; also catalog entry for RP 11BR.
API Spec 11B 28th Edition Addendum 1 notice (Sept 2025)	Public addendum document listing deleted / added variables, added gauge symbols, and polished-rod thread section changes.
Tenaris API Sucker & Pony Rod PDS SRAPI R01 (effective 31 Oct 2025)	Public API-compliant rod sizes, nominal lengths, grade chemistry, mechanical properties, maximum pulling force, and order-entry fields.
Tenaris API Grade Sucker Rod Coupling PDS SRCSRAPI C02 (effective 23 Dec 2024)	Public coupling dimensions, TA alloy chemistry / properties, NDT note, and coupling order-entry fields.

Boundary note: this dossier is intentionally conservative. It uses only public information that could be checked directly from current source documents. For full normative use - including complete thread forms, tolerance tables, gauge drawings, acceptance detail, and all proprietary clause text - the purchased full API Spec 11B document remains the controlling reference.