hymatik

HANDBOOK · ASSEMBLY AND SAFETY

Parker A-LOK® & CPI™ instrumentation fittings

Assembly, inspection and safe operation of compression tube fittings and associated instrumentation pipe fittings (NPT / BSPT / BSPP)



Hymatik · Hvidkærvej 27A · DK-5250 Odense SV · Denmark · hymatik.dk
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Illustrations: Parker Hannifin Corporation, reproduced from Parker technical guides and catalogues. In case of discrepancy, the latest Parker catalogue applies.

1 Purpose and use

This handbook is a practical assembly guide for Parker A-LOK® and CPI™ instrumentation fittings and the associated instrumentation pipe fittings. The aim is a connection that is leak-tight the first time and can be remade many times.

- **Audience:** fitters, service technicians, workshop staff and sales staff who need to be able to instruct customers.
- **Use:** section 2 (safety) and sections 5–6 (assembly) are the core and form the basis of the training presentation. The checklists in section 11 are for use on site.
- **Basis:** Parker *Connector and Tubing Solutions – Technical Guide*, catalogue 4230/4233 (11/2025), 4260 (10/2025) and 4190-FMTG (02/2025). In case of discrepancy, the latest Parker catalogue applies.

RESPONSIBILITY

Parker stresses that the user is solely responsible for the final selection of system and components, and for ensuring that all performance, maintenance and safety requirements are met. Improper selection or use can cause death, personal injury and property damage.

2 Safety – the non-negotiable rules

> An instrumentation fitting under pressure is stored energy. A tube blown out of an incorrectly assembled fitting can strike like a projectile, and gases such as helium and hydrogen or toxic media can leak unnoticed.

From Parker (4230/4233 and CTS Technical Guide)

1. **Never make up by torque or "feel".** Always count turns from finger-tight (1¼ / ¾ turn). Variations in tube and fitting tolerances, wall thickness and lubricity make torque unreliable.
2. **Never exceed the recommended working pressure.** Pressure is set by the tube (material, diameter, wall) and any threaded end – the lowest value applies.
3. **Do not mix materials.** Stainless fittings only on stainless tubing, aluminium on aluminium, etc. The only exception: brass fittings on copper tubing. Mixed materials cause galvanic corrosion and the wrong hardness relationship.
4. **Check with the gap gauge** after initial make-up. If the gauge can be slipped between nut and body, the fitting is not tight enough.
5. **Lubricate the nut** on large sizes: inch size 20 and up, metric 25 mm and up. Above 1", use the Parker hydraulic presetting tool.

Hymatik practice (good industry practice)

1. **Work only on depressurised systems.** Isolate, vent and verify 0 bar (gauge/vent) before loosening a nut. Lockout/tagout according to the site procedure.
2. **Never retighten under pressure.** A leaking fitting is depressurised first, inspected and remade.
3. **Never mix manufacturers.** Body, nut and ferrule(s) must all be Parker A-LOK or Parker CPI – and A-LOK and CPI parts must not be interchanged either. Cross-references apply to replacing complete fittings, not individual parts.
4. **Do not mix inch and metric.** 6 mm and 1/4" (6.35 mm) look alike but are not compatible. Metric fittings have a stepped shoulder on body and nut.
5. **Personal protective equipment:** safety glasses always; gloves when cutting and deburring; hearing protection when pressure testing with gas.
6. **Pressure testing** follows the site procedure, in a barricaded area and preferably hydrostatic rather than with gas when the medium allows.
7. **Documentation:** heat code (HCT) and 2.1/3.1 certificates must accompany the parts where the customer requires traceability.

3 Product overview: A-LOK® and CPI™

> Both series are compression fittings for instrumentation, process and control systems, are supplied assembled and ready to use, and are made up with the same number of turns. The difference lies in the ferrule design.

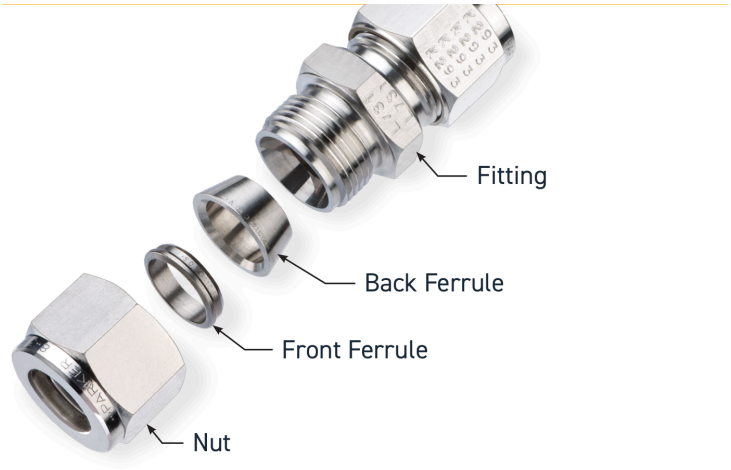


Figure 3.1 – *A-LOK® two-ferrule fitting, exploded view: body (fitting), back ferrule, front ferrule and nut. Source: Parker A-LOK Assembly Wall Chart 4190-1.*

	A-LOK® (two ferrules)	CPI™ (single ferrule)
Parts	4: body, nut, front ferrule, back ferrule	3: body, nut, ferrule
Seal	Front ferrule seals against tube and body cone	Ferrule seals against tube and body cone
Tube grip	Suparcase®-hardened back ferrule bites into the tube	Suparcase®-hardened ferrule grips the tube
Nut	Silver plated (anti-galling)	Molybdenum disulfide coated, fine-pitch thread
Material designator	-316 (e.g. 8MSC4N-316)	-SS (e.g. 8-4FBZ-SS)
Make-up	1¼ turns from finger-tight (¾ below 1/4" / 6 mm)	Same

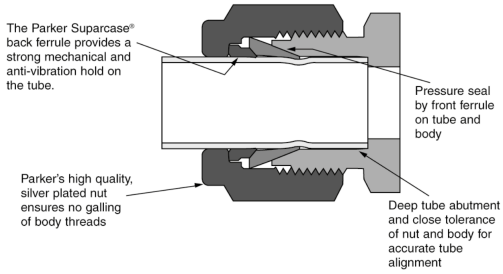


Figure 3.2 – *A-LOK® cross-section: the front ferrule seals, the back ferrule grips the tube. Source: Parker CTS Technical Guide.*

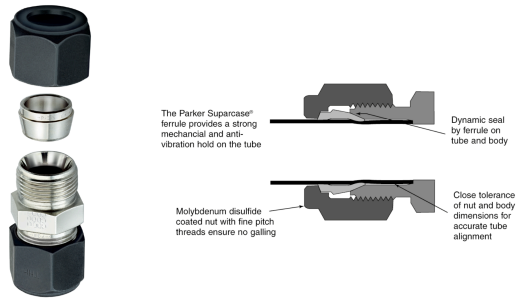


Figure 3.3 – *CPI™ exploded view and cross-section: one ferrule seals and grips. Source: Parker 4230/4233 and CTS Technical Guide.*

Common features (Parker 4230/4233): the tube is not twisted during make-up as all motion is transmitted axially; the body is not distorted outwards, so the nut backs off freely and the fitting can be remade many times; seals on both thin- and heavy-wall tubing under pressure, vacuum and vibration.

Materials: standard is 316 stainless steel with heat code traceability (HCT). Also steel, brass, aluminium, Monel 400, Hastelloy C-276, Alloy 600, titanium, 6Mo and Incoloy 625 and 825.

Identifying size and type

- Inch sizes are given in 1/16": 4 = 1/4", 8 = 1/2", 16 = 1".
- Metric fittings have a **stepped shoulder** on body and nut and an M in the part number (A-LOK e.g. M12FSC1/4N-316).
- A-LOK and CPI components must never be interchanged between series or with other manufacturers.

> **Selection:** follow the customer specification and the existing installation, so that only one series is used on the same plant. This reduces the risk of mixed parts during service.

4 Tube selection and preparation

> The tube is the critical link: good tubing is fully annealed, softer than the ferrule, round, free of scratches and has a wall thickness within the tables. For stainless steel Parker recommends approx. 80 HRB and max. 90 HRB.

Ordering tubing – always specify material, outside diameter and wall thickness. Parker's example purchase text: *"1/2 x .049 316 stainless steel, seamless, or welded and redrawn per ASTM A-249. Fully annealed, 80 Rb or less. Must be suitable for bending."*

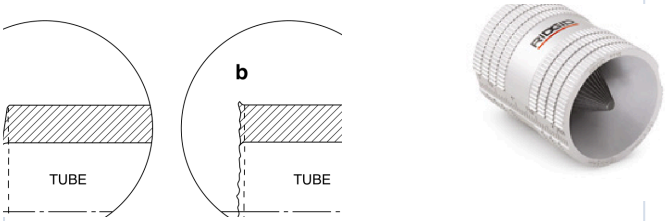
Material	ASTM spec	Condition	Max. hardness
Stainless 304/316/316L	A269, A249, A213, A632	Fully annealed	90 HRB (recommended ~80)
Carbon steel 1010	A179, SAE J524b/J525b	Fully annealed	72 HRB
Copper K/L	B75, B68, B88	Soft annealed	60 HR15T
Aluminium 6061	B210	T6	56 HRB
Monel 400	B165	Fully annealed	75 HRB
Hastelloy C-276 / Alloy 600 / Carpenter 20	B622/B626, B167, B468	Fully annealed	90 HRB
Titanium grade 2	B338	Fully annealed	99 HRB

GAS SERVICE

The ferrule must penetrate the tube surface to seal micro-scratches. This requires sufficient wall thickness (radial resistance) and tubing that is softer than the ferrule. Use the minimum wall for gas from the tables and choose tubing at the soft end of the hardness range. Helium and argon cannot be sealed on scratched tubing.

Preparation step by step

1. **Handling:** never drag tubing across floors, truck beds, racks or the ground. Scratches and ovality cause leaks because the tube does not fit the ferrule and body bore.
2. **Cutting:** cut square. Use a tube cutter with a wheel designed for stainless (a dull wheel work-hardens the tube at the cut) or a hacksaw in a saw guide (e.g. TRU-KUT) with at least 32 teeth per inch.
3. **Deburring:** remove burrs inside and outside. Outside burrs prevent the tube from bottoming; inside burrs can break loose and damage filters. Do not over-deburr the outside.
4. **Cleaning:** blow out with low-pressure compressed air or flush with solvent, and wipe with a lint-free cloth so no chips enter the system.
5. **Mark the insertion depth** with the Parker tube marker, so you can confirm after make-up that the tube stayed bottomed.



Figures 4.1–4.2 – *Tube end cut with a tube cutter (a) and a hacksaw (b) – both leave burrs; deburring tool for inside and outside. Source: Parker CTS Technical Guide.*

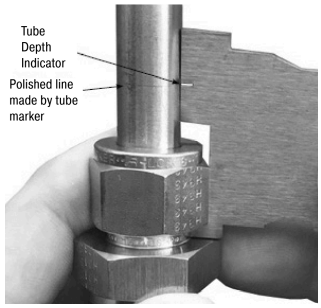


Figure 4.3 – *Tube marker and combination gauge: the mark shows that the tube stayed bottomed. Source: Parker CTS Technical Guide.*

Minimum straight tube length at the fitting (L) and minimum bend radius (R), mm – CTS Technical Guide p. 8. R is indicative and depends on material, wall and bending tool.

Tube OD	3 mm 1/8"	6 mm 1/4"	8 mm 5/16"	10 mm 3/8"	12 mm 1/2"	16 mm 5/8"	18 mm 3/4"	25 mm 1"
L recommended	18	21	22	23	28	30	32	35
L minimum	15	17	18	19	25	27	28	33
R min. bend radius	9.5	14	18	24	38	38	45	76

5 Assembling A-LOK® step by step

> Correct A-LOK make-up is 1¼ turns from finger-tight for 1/4"–1" and 6–25 mm, and ¾ turn for 1/16"–3/16" and 2–4 mm. Count turns – never torque.

Before you start: the tube is cut square, deburred, clean and marked for insertion depth (section 4). The fitting is Parker A-LOK with intact parts in the correct order.

Initial make-up

1. Insert the tube into the fitting until it **bottoms** against the body shoulder. Turn the nut on by hand until finger-tight.
2. **Mark the nut** at the 6 o'clock position as a reference (marker line across nut and body).
3. Hold the body with one wrench and tighten the nut with another **1¼ turns**, so the mark ends at 9 o'clock. Below 1/4" / 6 mm: only **¾ turn**.
4. **Check with the Parker gap gauge** (inspection gauge) between nut and body hex. If the gauge does *not* fit, the fitting is correctly tightened. If it fits, repeat the make-up.
5. Check with the combination gauge that the tube mark lines up with the polished line from the tube marker – proving that the tube stayed bottomed during make-up.



Figure 5.1 – *Step 1: tube bottomed, nut finger-tight. Step 2: mark at 6 o'clock. Source: Parker A-LOK Assembly Wall Chart 4190-1.*



Figure 5.2 – *Gap gauge (No-Go). If it fits between nut and body, the fitting is not tight enough. Source: Parker CTS Technical Guide.*

If the fitting has been disassembled: the small tapered end of the ferrule(s) faces into the body. Front and back ferrule must not be swapped or reversed.

Special parts

- **Plugs** and the plug end of **port connectors**: only **¼ turn** from finger-tight.
- The other end of a port connector is tightened 1¼ turns as normal.
- **Large sizes:** lubricate the nut thread at inch size 20+ and metric 25 mm+. Above 1" (size 16), use the Parker hydraulic presetting tool (Hy-Fer-Set), see section 6.



Figure 5.3 – *Plug and port end: ¼ turn. Other end of port connector: 1¼ turns. Source: Parker A-LOK Assembly Wall Chart 4190-1.*

Remake

1. Mark nut and body **before** disassembly.
2. Insert the tube with the preswaged ferrules back into the body until the ferrule seats in the cone. Tighten the nut finger-tight.
3. With a wrench, rotate back to the original position (marks aligned). A noticeable increase in resistance shows the front ferrule is being sprung back into its sealing position.
4. Only after several remakes may it be necessary to go slightly past: **10–20°** (less than 1/3 of a hex flat).

The gap gauge is used only for initial make-up – not for remakes.

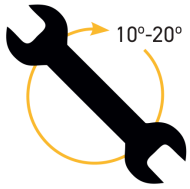


Figure 5.4 – *At most 10–20° past the mark. Source: Parker Wall Chart.*

Why not torque? Parker specifically warns: tube and fitting tolerances, wall thickness and nut lubricity vary, so a given torque does not produce consistent ferrule engagement.

6 Assembling CPI™ and presetting

> CPI is made up exactly like A-LOK: 1¼ turns from finger-tight (¾ below 1/4" / 6 mm), gap gauge check and remake to the marks plus 10–20° if needed. Parker publishes one common instruction for both series.

Differences the fitter must know

- CPI has **one ferrule**. If the fitting is disassembled, the small tapered end of the ferrule faces into the body.
- The nut is molybdenum disulfide coated with a fine-pitch thread; it must not be swapped with an A-LOK nut or a third-party nut.
- Parts are compatible only within CPI. A CPI ferrule in an A-LOK body (or vice versa) is a dangerous mis-assembly.

Presetting with the Parker Hy-Fer-Set (hydraulic preset)

Used for sizes above 1" and for the heavy-wall combinations marked in the tube tables with "Use 'Hyferset' pre-assembly tool". The tool gives consistent ferrule engagement where hand make-up is too heavy or uncertain.

1. Place nut, ferrule(s) and **body die** on the tube. The tapered end of the ferrules points towards the body die.
2. Insert the U-shaped **nut die** into the back-up plate of the hydraulic ram, and place the tube assembly in it.
3. Close the relief valve and pump until the ram reaches its stop and the nut bottoms against the body die. Resistance in the pump handle rises noticeably.
4. Open the relief valve; the ram returns automatically.
5. Pull off the body die. If it sticks: hold the body die and work the tube back and forth. **Never grip or pull on the preset ferrules** – the sealing surface can be damaged.
6. Insert the preset assembly into the fitting body, check that the ferrule seats in the cone, and tighten finger-tight.
7. Tighten with a wrench the number of degrees Parker specifies for the size (table in 4190-FMTG p. 212). If no early increase in resistance is felt, the assembly was not seated: tighten until resistance is felt, loosen to finger-tight, and tighten the specified amount again.

> Body dies and nut dies are size specific. Always use dies matching the fitting series and size.

7 Pipe fittings and threaded ends

> Tapered threads (NPT, BSPT/ISO 7) seal *on the thread* and require a thread sealant; parallel threads (BSPP/ISO 228, SAE/UNF) seal *with a gasket* against a flat face and must not be sealed with tape.

Thread	Standard	Flank	Seals via	Parker code
NPT (tapered)	ANSI/ASME B1.20.1	60°	Thread + sealant	(standard)
BSPT (tapered)	ISO 7/1, BS21	55°	Thread + sealant	K
BSPP form A	ISO 228-1, DIN 3852-2	55°	Bonded seal centred by taper under the hex	R
BSPP form B	ISO 228-1	55°	Cutting face against flat face, copper washer optional	BR
SAE/UNF straight thread	SAE J1926	60°	O-ring	–

Part number examples (4260): 4-4K FBZ-SS = 1/4" CPI × 1/4" BSPT; 6MSC4BR-316 = 3/8" A-LOK × 1/4" BSPP form B (use a copper washer).

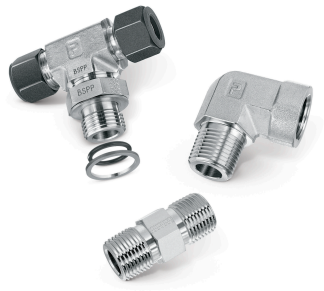


Figure 7.1 – *ISO conversion fittings with BSPP and bonded seal. Source: Parker 4260.*

Sealing tapered threads with PTFE tape

Tape to BS 7786, 12 mm × 0.075 mm.

1. Starting at the first thread, apply **five layers**, pulled firmly into the thread without breaking the tape.
2. Always wrap **in the direction of the thread helix** (clockwise looking at the thread end).
3. Cover the remaining exposed threads with a 50% overlap.
4. Check that no tape overhangs the front of the thread and that it is not shredded – loose tape is carried into instruments and valves.

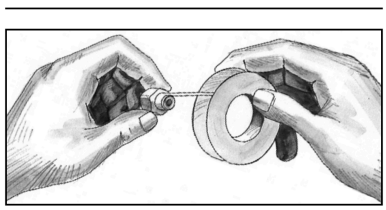


Figure 7.2 – *PTFE tape wrapped in the direction of the thread. Source: Parker CTS.*

Liquid/anaerobic sealants (e.g. Parker PSP, -60 to +150 °C) cure on metal contact in the absence of air. Ready for operation after approx. 1 hour, fully cured after up to 24 hours. Types containing PTFE ease disassembly and reduce galling on stainless. Food-related applications require a food-grade sealant.

Parallel threads (BSPP/SAE) with O-ring or washer

- Lubricate the O-ring with a lubricant compatible with the medium.
- Fixed fittings: tighten approx. **¼ turn** from finger-tight after the washer contacts; do not extrude soft seals.
- Adjustable (orientable) fittings: screw in until the washer touches the port, back out at most 1 turn to orient, hold the fitting and tighten the locknut.
- The spot face must be flat, square to the thread and free of tool marks.

> **Pressure:** for a fitting with both a tube end and a threaded end, the **lowest** value applies – often the thread. Example 316 stainless, bar stock: 1/4" NPT/BSPT male 7,500 psi (517 bar), female 6,600 psi (455 bar); 1/2" male 6,600 psi (455 bar), female 5,200 psi (359 bar). Fittings made from forgings (elbows, tees) are rated lower. Full table: 4230/4233 p. 121.

Good habits

- Never tape or paste on the compression end (A-LOK/CPI) – only on tapered threads.
- Do not mix NPT and BSPT: they look alike but have different flank angles and pitch (1/4": 18 NPT vs 19 BSP threads per inch), and the joint will leak or fail.
- Stainless against stainless threads can gall: use a sealant with lubricating properties and tighten steadily.

8 Tube routing, bending and support

> A strained joint will eventually leak. Tubing must therefore be routed so that the fitting never carries weight, pull, vibration or thermal movement.

Why tubing rather than pipe: fewer joints and leak paths (bends replace elbows), no weakening from thread cutting, smooth internal bore, less weight and space, and every connection acts as a union that can be remade.

Routing rules (CTS Technical Guide)

- Avoid strain on the joints – the tube must fit before the nut is tightened, never be forced into place.
- Use a **U-bend** in long straight runs to allow for expansion and contraction.
- Allow for motion under load: even "rigid" systems move.
- Prefer two 45° bends to one 90° bend – lower pressure drop.
- Keep tubing away from components that need regular maintenance.
- Route tubing neatly and clearly; it makes troubleshooting and repair easier.

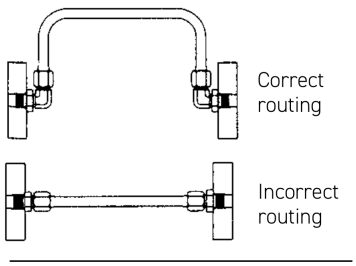


Figure 8.1 – *Top correct, bottom incorrect: a straight tube strains the joints. Source: Parker CTS.*

Bending

- Use a bending tool for the actual diameter (e.g. Parker PTB-6M: 6 mm, radius 16 mm; PTB-12M: 12 mm, radius 38 mm).
- Keep at least the recommended straight length L from the fitting to the start of the bend (table in section 4), so the tube can bottom squarely in the fitting.
- Typical bending faults: **flattened** (radius too small or wrong block), **kinked** (tube slips in the tool or is not annealed), **wrinkled** (thin-wall tube) and **broken** (hard tube or mandrel too far forward). Scrap tubes with these faults.

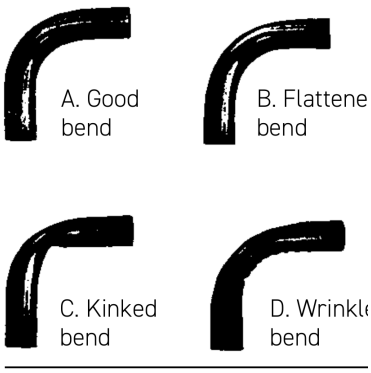


Figure 8.2 – *A good, B flattened, C kinked, D wrinkled. Source: Parker CTS.*

Support and vibration

- Clamp the tube close to heavy components (valves, manifolds) so the weight does not hang on the fitting.
- Use tube clamps with inserts that dampen vibration and prevent metal-to-metal wear.
- Where there is expansion and vibration: place clamps so the U-bend can work freely.
- Clamp spacing depends on tube size and vibration level; follow the site specification.

9 Pressure, temperature and materials

> The allowable working pressure of the system is the lowest of: the tube pressure (material, OD, wall), the threaded end pressure (section 7) and the pressure at operating temperature (derating). Combinations without a value in the tables must not be used with instrumentation fittings.

Parker tube pressures are calculated to ASME B31.3 at room temperature, maximum OD and minimum wall.

Metric 316/316L tubing – working pressure in bar

CTS Technical Guide table 1, ASTM A269, fully annealed. Gas service requires minimum wall as marked in the original table – not reproduced here.

OD \ wall (mm)	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5
6 mm	330	430	520	680	–	–	–	–
8 mm	–	310	380	490	–	–	–	–
10 mm	–	240	300	380	470	–	–	–
12 mm	–	200	240	310	380	430	–	–
16 mm	–	–	190	240	300	330	370	430

Inch 316/304 seamless tubing – working pressure in psi (bar)

4230/4233 table 2. Welded and redrawn tubing is approx. 15% lower (table 3).

OD \ wall (in)	0.035	0.049	0.065	0.083	0.095	0.109
1/4"	5,100 (352)	7,500 (517)	10,300 (710)	–	–	–
3/8"	3,300 (228)	4,800 (331)	6,600 (455)	–	–	–
1/2"	2,600 (179)	3,700 (255)	5,100 (352)	6,700 (462)	–	–
3/4"	–	2,400 (165)	3,300 (228)	4,300 (296)	5,000 (345)	5,800 (400)
1"	–	–	2,400 (165)	3,200 (221)	3,700 (255)	4,200 (290)

Temperature derating – multiply the table pressure by the factor

Temperature	316 SS	304 SS	Carbon steel	Copper	Monel 400
38 °C	1.00	1.00	1.00	1.00	1.00
93 °C	1.00	1.00	0.96	0.80	0.88
149 °C	1.00	1.00	0.90	0.78	0.82
204 °C	0.97	0.94	0.86	0.50	0.79
260 °C	0.90	0.88	0.82	–	0.79
316 °C	0.85	0.82	0.77	–	0.79
371 °C	0.82	0.80	0.73	–	0.79
427 °C	0.80	0.76	0.59	–	0.76
538 °C	0.77	0.69	–	–	–
649 °C	0.37	0.30	–	–	–

Example (Parker): 1/2" × 0.049 seamless 316 = 3,700 psi at room temperature; at 427 °C × 0.80 = 2,960 psi (204 bar).

Material selection and temperature ranges (4230/4233 table 1)

Material	Typical application	Temperature
316 stainless	High pressure, high temperature, generally corrosive media	-255 to 650 °C
Carbon steel	High pressure/temperature: oil, air	-29 to 425 °C
Copper / aluminium	Low pressure and temperature: water, oil, air	-40 to 205 °C
Monel 400	Sour gas, marine, chemical	-198 to 425 °C
Hastelloy C-276	Oxidising and reducing media, pitting	-198 to 535 °C
Alloy 600	High temperature, corrosive media	-130 to 650 °C
Titanium	Seawater, salt solutions	-59 to 315 °C

Above 425 °C, 300-series stainless can suffer carbide precipitation and intergranular corrosion. Coated or plated parts may have a lower maximum temperature. Offshore and chloride-containing environments: consider 6Mo or super duplex (FMTG).

10 Common faults and troubleshooting

> Most leaks are caused by tube preparation or the wrong number of turns – not by the fitting itself. Always depressurise before inspection.

Symptom	Probable cause	Action
Leak after initial make-up, gap gauge fits	Under-tightened	Depressurise, tighten to the correct turn, check again
Leak, tube mark does not line up with gauge	Tube was not bottomed or slipped during make-up	Cut the tube behind the ferrule, prepare a new end, make up with new ferrules
Leak on gas (He, H_2, N_2) but not on liquid	Scratched tube, tube too hard or wall too thin	Use scratch-free tubing, max. ~80 HRB and minimum wall for gas
Tube blows out / slips	Wrong manufacturer or series of ferrule, missing back ferrule, under-tightened, mm tube in inch fitting	**Stop**, inspect the parts, replace the complete assembly
Leak after remake	Not tightened to the mark, dirt in the cone, damaged ferrule	Clean, tighten to mark + 10–20°; if leak persists, new ferrule and new tube end
Nut runs heavily / galls	Galling on large stainless sizes without lubrication	Lubricate nut thread (size 20+ / 25 mm+), use presetting tool above 1"
Leak at threaded end	Wrong thread type (NPT in BSPT, BSPP without seal), too little/wrong tape	Identify the thread, use the correct seal per section 7
Tube oval or flattened at the fitting	Straight length before bend too short, wrong bending tool	Observe minimum length L and bend radius
Galvanic corrosion at the joint	Mixed materials (e.g. stainless fitting on copper)	Use the same material for fitting and tube

NEVER AS A "REPAIR"

Retightening under pressure, extra turns far beyond the mark, tape or paste on the compression end, or a ferrule from another manufacturer.

11 Checklists

The checklists can be printed and used per joint or per tube run.

Before work

- [ ] The system is depressurised, isolated, and 0 bar verified
- [ ] Safety glasses and gloves are on
- [ ] Fittings are Parker A-LOK *or* CPI – no mixed series or manufacturers
- [ ] Fitting and tube material are the same (except brass/copper)
- [ ] Inch/metric matches (stepped shoulder = metric)
- [ ] Tube OD, wall and hardness give sufficient pressure at operating temperature
- [ ] Port thread type identified (NPT / BSPT / BSPP / SAE)

Tube preparation

- [ ] Scratch-free, round tube
- [ ] Cut square with stainless wheel or saw guide
- [ ] Deburred inside and outside, not over-deburred
- [ ] Cleaned of chips
- [ ] Insertion depth marked with tube marker
- [ ] Minimum straight length L observed when bending

Make-up

- [ ] Tube bottomed in the fitting, nut finger-tight
- [ ] Nut marked at 6 o'clock
- [ ] Body held with a backup wrench
- [ ] 1¼ turns (¾ below 1/4" / 6 mm; ¼ for plugs)
- [ ] Lubrication/presetting tool for large sizes
- [ ] Gap gauge does NOT fit
- [ ] Tube mark lines up with combination gauge

Threaded ends

- [ ] Tapered threads: 5 layers of PTFE in thread direction, nothing over the front edge – or anaerobic sealant
- [ ] Parallel threads: correct seal/O-ring lubricated, no tape
- [ ] No tape/paste on the compression end

Completion

- [ ] Tube supported, no strain on the joints
- [ ] U-bend in long runs
- [ ] Pressure test per procedure in a barricaded area
- [ ] Traceability (heat code, 2.1/3.1 certificate) documented if required

Fitter: _____ Date: _____ Plant/tube run: _____

12 References and version history

Source	Edition	Used for
Parker *Connector and Tubing Solutions – Technical Guide* (CTS)	Latest, received 2026	Principles, assembly, gauges, metric pressure table, tube preparation, routing, thread sealing
Parker CPI™ / A-LOK® Series Tube Fittings, catalogue 4230/4233	11/2025	Make-up/remake, torque caution, tube selection, pressure and derating tables, pipe end ratings
Parker Instrument Pipe & ISO Conversion Fittings, catalogue 4260	10/2025	NPT/BSPT/BSPP, form A/B, sealing requirements, part numbers
Parker Fittings, Materials and Tubing Guide, 4190-FMTG	02/2025	Material selection, galvanic corrosion, Hy-Fer-Set, PSP sealant, gauges
Parker A-LOK Fitting Assembly Wall Chart, 4190-1	05/2024	Assembly chart for workshop and training

Version history

Version	Published	Changes
1.0	2 November 2026	First edition. Danish and English versions published together.

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CONTACT

Hymatik · Hvidkærvej 27A, DK-5250 Odense SV, Denmark · Tel. +45 6312 8300 · parkerstore@hymatik.dk · hymatik.dk