

Pressure Gauge Thread Standards Guide

G / BSP · NPT · BSPT · PT · Metric — connection reference by MANOGAUGE

Thread Standards Overview

Designation	Standard	Type	Region	Sealing / Notes
G (BSPP)	ISO 228	Parallel	Europe / Intl	Seals via bonded washer / O-ring at face
R (BSPT)	ISO 7	Tapered	Europe / Intl	Seals on threads (PTFE tape / sealant)
Rc (BSPT)	ISO 7	Tapered (female)	Europe / Intl	Mates with R male tapered
NPT	ASME B1.20.1	Tapered 60°	North America	Seals on threads (PTFE tape / sealant)
PT (JIS)	JIS B0203	Tapered	Japan / Asia	Equivalent to BSPT / R
M (Metric)	ISO 261	Parallel	Europe / China	e.g., M20×1.5, seals via washer

Parallel vs Tapered: Parallel threads (G, M) seal at the face with a washer/O-ring; tapered threads (NPT, R/BSPT, PT) seal along the threads with PTFE tape or sealant. **G ≠ NPT** — not interchangeable.

Common Pressure Gauge Connections

Connection	Approx. OD (mm)	TPI / Pitch	Type
G1/8	9.73	28 TPI	Parallel
G1/4	13.16	19 TPI	Parallel
G3/8	16.66	19 TPI	Parallel
G1/2	20.96	14 TPI	Parallel
1/8 NPT	10.2	27 TPI	Tapered
1/4 NPT	13.6	18 TPI	Tapered
3/8 NPT	17.1	18 TPI	Tapered
1/2 NPT	21.2	14 TPI	Tapered
M14×1.5	14.0	1.5 mm	Parallel
M20×1.5	20.0	1.5 mm	Parallel

Selection tips

- Match both the **standard** and the **size** of the mating port.
- North America usually uses **NPT**; Europe/Asia commonly **G/BSP**; metric **M20×1.5** is common on many gauges.
- Confirm bottom-mount vs back-mount and the wrench-flat size when ordering.

Need a specific thread? MANOGAUGE offers G, NPT, BSPT, PT and metric connections across all gauge types — www.manogauge.com.

About MANOGAUGE

MANOGAUGE (Zhejiang Xinzhongxin Instrument Technology Co., Ltd.) — a National High-Tech pressure gauge manufacturer in China: stainless steel, liquid-filled, digital, diaphragm, tire, medical and explosion-proof gauges, with CE/PED/ATEX/FDA and OEM/ODM service. More & quotes: www.manogauge.com | sales@manogauge.com. Free to share or cite — please keep the source link to www.manogauge.com.