

Recommended tightening torques for PMA connectors



Please note:

- The tightening torque values quoted below should be considered as absolute **maximum values** which should not be exceeded.
- They are based upon practical laboratory measurements under standard climatic conditions (23°C / 50% relative humidity).
- Climatic conditions during assembly and in the application, which may affect the component characteristics, should be considered.
- The characteristics of other components to which the PMA parts are being connected must also be considered.
- For installations exposed to high levels of vibration and/or fast temperature changes thread locking and sealing compound can be recommended to prevent threads becoming loose over time.
- A lower tightening torque with a locking and sealing compound can provide good long-term performance.

Tightening torques for PMA polyamide thread fittings to threaded holes or with PMA (BMN & GMN) lock nuts

Metric polyamide thread size	Torque [Nm]	NPT polyamide thread size	Torque [Nm]	PG polyamide thread size	Torque [Nm]
M12	1.5	NPT 1/2"	4.0	PG07	1.5
M16	3.0	NPT 3/4"	6.0	PG09	1.5
M20	4.0	NPT 1"	8.0	PG11	2.0
M25	6.0	NPT 1 1/4"	9.0	PG13.5	2.5
M32	8.0	NPT 1 1/2"	15.0	PG16	4.0
M40	9.0	NPT 2	15.0	PG21	5.0
M50	10.0			PG29	9.0
M63	10.0			PG36	15.0
				PG48	15.0

UNEF polyamide thread size	Torque [Nm]	UNEF polyamide thread size	Torque [Nm]
1/2"-28 UNEF	2.0	1 3/16"-18 UNEF	10.0
9/16"-24 UNEF	3.0	1 1/4"-18 UNEF	10.0
5/8"-24 UNEF	3.0	1 5/16"-18 UNEF	10.0
1 1/16"-24 UNEF	3.0	1 3/8"-18 UNEF	10.0
3/4"-20 UNEF	4.0	1 7/16"-18 UNEF	15.0
13/16"-20 UNEF	4.0	1 5/8"-18 UNEF	15.0
7/8"-20 UNEF	8.0	1 3/4"-18 UNS	15.0
15/16"-20 UNEF	8.0	2"-18 UNS	15.0
1"-20 UNEF	8.0	2 1/4"-16 UN	15.0
1 1/16"-18 UNEF	10.0	2 1/2"-16 UN	15.0



Tightening torques for PMA metal thread fittings to threaded holes or with PMA (GMM) lock nuts

Metric metal thread size	Torque [Nm]	NPT metal thread size	Torque [Nm]	PG metal thread size	Torque [Nm]
M12	4.0	NPT 1/2"	6.0	PG07	3.5
M16	4.0	NPT 3/4"	8.0	PG09	4.0
M20	6.0	NPT 1"	10.0	PG11	6.0
M25	8.0	NPT 1 1/4"	15.0	PG13.5	6.0
M32	10.0	NPT 1 1/2"	15.0	PG16	7.0
M40	15.0	NPT 2	15.0	PG21	8.0
M50	15.0			PG29	10.0
M63	15.0			PG36	15.0
				PG48	15.0

UNEF metal thread size	Torque [Nm]	UNEF metal thread size	Torque [Nm]
1/2"-28 UNEF	4.0	1 3/16"-18 UNEF	10.0
9/16"-24 UNEF	5.0	1 1/4"-18 UNEF	10.0
5/8"-24 UNEF	5.0	1 5/16"-18 UNEF	10.0
1 1/16"-24 UNEF	5.0	1 3/8"-18 UNEF	10.0
3/4"-20 UNEF	6.0	1 7/16"-18 UNEF	15.0
13/16"-20 UNEF	6.0	1 5/8"-18 UNEF	15.0
7/8"-20 UNEF	10.0	1 3/4"-18 UNS	15.0
15/16"-20 UNEF	10.0	2"-18 UNS	15.0
1"-20 UNEF	10.0	2 1/4"-16 UN	15.0
1 1/16"-18 UNEF	10.0	2 1/2"-16 UN	15.0



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Tightening torques for nuts and bolts used with PMA conduit clamps, PMA conduit supports and PMA flange fittings

Thread size	Torque [Nm]
M4	2.0
M5	3.0
M6	4.0
M8	10.0
M10	15.0



Tightening torques for PMA purely metallic fittings and accessories (e.g. SCA, SWA, MAVI, MONK, JENQ, NSNV, NSBIV)

Metric metal thread size	Torque [Nm]	NPT metal thread size	Torque [Nm]	PG metal thread size	Torque [Nm]
M16	10.0	NPT 1/2"	15.0	PG09	15.0
M20	20.0	NPT 3/4"	20.0	PG11	15.0
M25	30.0	NPT 1"	30.0	PG13,5	20.0
M32	35.0	NPT 1 1/4"	35.0	PG16	30.0
M40	35.0	NPT 1 1/2"	40.0	PG21	30.0
M50	40.0	NPT 2"	40.0	PG29	35.0
M63	40.0			PG36	40.0
				PG48	40.0



Tightening torques for PMA connectors with strain relief elements

Pflitsch strain relief inserts UNI Dicht Info No. 13
Jacob strain relief inserts PERFECT Info No. 14



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