AGRO cable glands.

Progress[®] compression technology and Syntec[®] lamellar technology.

Important installation instructions: Torque values





This is what AGRO stands for:

For more than 65 years already, AGRO has been developing and manufacturing high-quality cable laying and cable entry products and systems for plant and equipment construction, for machine fabrication, and for professional electrical installation work in buildings of all kinds.

Determination of exact torque:

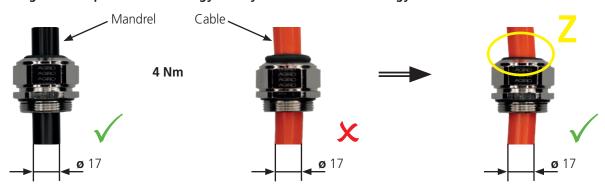
Various differences arise in theory and practice when determining the exact torque for cable glands. However, these can be easily explained:

According to IEC / EN 62444, so-called **test mandrels** are used for testing and determining torques. The standard specifies that these test mandrels must have a hardness of 65 Shore D. The required surface roughness is also specified. The torques determined according to the standard can be found on pages 4 to 8.

Evaluations with cables inevitably give different results, since cables according to different standards and with different surfaces are used in practice. Therefore, the correct torque can only be determined using the same cable and cable gland that will be actually used. AGRO will be happy to carry out such testing for you in the company's certified in-house laboratory. Let us show you what we can do.

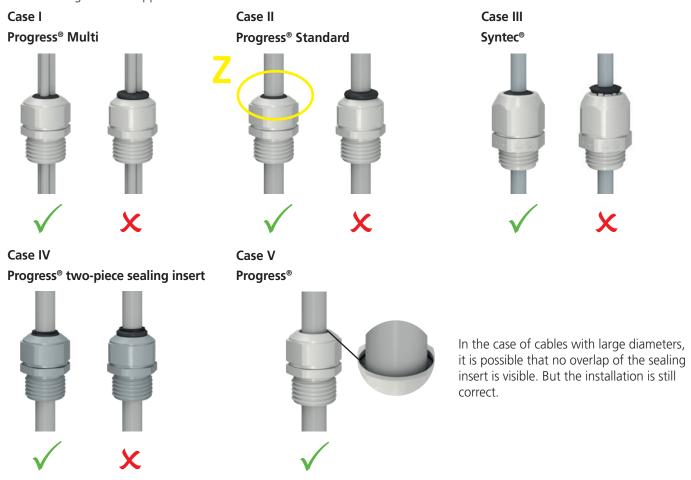
Below you will find the illustrations as a visual aid.

Progress® compression technology and Syntec® lamellar technology



The above pictures clearly show that the torque determined according to the standard cannot simply be applied to any cable.

The following overview applies for all materials.



Trapezoid-shaped articulated lamellas



The exceptional ensures excellent strain relief. lamellar technology.





When the cable gland is tightened, the trapezoid-shaped come smoothly together and squeeze the cable into a hexagon-like shape so that it cannot rotate.





Compression nut



Sealing insert



Important note

In general: The torques depend on many different factors and influences. The examples shown are therefore given **as a visual aid only**.



Entry threads



AGRO's certified laboratory



In order to enable customers to compare products, a cable-like test mandrel was defined by IEC / EN 62444 and required to have certain characteristics. The hardness of the test mandrel must be 65 Shore D \pm 15 and the surface roughness Ra may not exceed 7 μ m. This ensures that all cable glands are tested identically.

These test mandrels can of course never cover the entire spectrum of cables. The cable structure, its filling, the nature of its outer sheath and the material pairing with the sealing insert of the cable gland are some important parameters that have a major influence on the entire connection – especially at the lower end of the clamping range in terms of cable diameter. If you want to be sure that the cable gland, when fitted to your cable, achieves protection class IP 68 or the required cable retention or strain relief, you can provide us with a piece of the cable for testing in our in-house laboratory.



Progress [®] Metal Thread Range Md ,			Progress [®] Metal for flat cables Thread Range Md			Progress [®] Metal Multi Progress [®] GFK Multi Thread Range Md			Progress [®] EMC Series 85 Thread Range Md ₀		
M6x1 M6x1 M6x1	(mm) 2.0 - 2.5 2.5 - 3.0 2.0 - 3.5	(Nm) 2 1 1		(mm)	(Nm)		(mm)	(Nm)		(mm)	(Nm)
M8x1.25 M8x1.25 M10x1.5 M10x1.5	2.5 - 3.5 3.5 - 5.0 3.0 - 4.0 4.0 - 6.0	2 1 4 2									
M12x1.5 M12x1.5 M12x1.5 M16x1.5	3.5 - 5.0 5.0 - 6.5 6.5 - 8.0 3.5 - 4.5	4 5 3	M16x1.5	7.3x2.5 - 9.0x4.2	6	M16x1.5	2 x 2.0 - 3.0	6	M16x1.5	4.5 - 6.0	6
M16x1.5 M16x1.5 M16x1.5 M16x1.5	4.5 - 6.0 6.0 - 8.0 8.0 - 10.5 6.0 - 10.5	6 5 3 4	III OXII.O	1.0/2.0	Ü	M16x1.5 M16x1.5	2 x 2.5 - 4.0 2 x 3.5 - 5.0	5 4	M16x1.5 M16x1.5	6.0 - 10.5 8.0 - 15.0	6 5
M20x1.5 M20x1.5 M20x1.5 M20x1.5	6.0 - 8.0 8.0 - 11.0 11.0 - 15.0 8.0 - 15.0	10 9 5 5	M20x1.5 M20x1.5	10.5x2.5 - 13.0x5.0 12.5x2.5 15.0x5.0	10 9	M20x1.5 M20x1.5 M20x1.5 M20x1.5 M20x1.5	2 x 3.5 - 5.0 2 x 4.5 - 6.0 2 x 5.5 - 7.5 3 x 3.5 - 5.0 3 x 4.5 - 6.0	10 9 5 5 5	M20x1.5 M20x1.5	8.0 - 15.0 12.5 - 20.5	5 7
M25x1.5 M25x1.5 M25x1.5 M25x1.5	9.5 - 12.5 12.5 - 16.0 16.0 - 20.5 12.5 - 20.5	10 10 4 7	M25x1.5	16.0x4.0 - 19.0x7.0	10	M20x1.5 M20x1.5 M20x1.5 M20x1.5	3 x 5.2 - 6.5 4 x 3.5 - 5.0 4 x 4.5 - 6.0 2 x 5.0 - 7.0	5 5 5	M25x1.5 M25x1.5	12.5 - 20.5 17.0 - 25.5	7 6
M32x1.5 M32x1.5 M32x1.5 M32x1.5	14.0 - 17.0 17.0 - 21.0 21.0 - 25.5 17.0 - 25.5	5 4 4 6	M32x1.5 M32x1.5	19x3.0 - 22.0x6.0 19.0x5.0 22.0x8.0	4	M25x1.5 M25x1.5 M25x1.5 M25x1.5 M25x1.5	2 x 6.7 - 9.0 2 x 7.7 - 10.0 3 x 5.5 - 7.0 3 x 6.8 - 9.0 4 x 5.5 - 7.0	10 5 4 4 4	M32x1.5 M32x1.5	17.0 - 25.5 24.0 - 33.0	6 12
M40x1.5 M40x1.5 M40x1.5 M40x1.5	20.0 - 24.0 24.0 - 28.5 28.5 - 33.0 24.0 - 33.0	10 8 9 12	M40x1.5 M40x1.5 M40x1.5 M40x1.5 M40x1.5	25.0x3.0 - 28.0x6.0 30.0x3.5 33.0x6.5 23.0x4.0 26.0x7.0 23.5x6.0 26.5x9.0 29.0x6.0 32.0x9.0	9 9 8 9 9	M25x1.5 M32x1.5 M32x1.5 M32x1.5	6 x 4.8 - 6.0 2 x 9.0 - 11.5 2 x 7.0 - 9.0 3 x 8.5 - 10.5	5 4 4	M40x1.5	24.0 - 33.0	12
M50x1.5 M50x1.5 M50x1.5 M50x1.5	29.0 - 33.0 33.0 - 37.0 37.0 - 42.0 33.0 - 42.0	11 14 14 22	M40x1.5 M50x1.5 M50x1.5 M50x1.5	27.0x7.0 30.0x10.0 36.5x2.5 40.0x6.0 34.0x4.0 - 37.0x7.0 31.0x8.5 34.0x11.5	9 14 14 11	M32x1.5 M32x1.5	4 x 7.0 - 9.0 6 x 5.8 - 7.0	4	M50x1.5	33.0 - 42.0	22
M63x1.5 M63x1.5 M63x1.5 M63x1.5	35.0 - 40.0 40.0 - 46.0 46.0 - 52.0 40.0 - 52.0	40 39 33 38	M50x1.5 M50x1.5 M63x1.5 M63x1.5	36.5x10.0 40.0x13.5 38.5x10.0 42.0x14.0 42.0x10.0 - 46.0x14.0 42.5x2.0 46.5x6.0	14 14 32 34				M63x1.5 M63x1.5	33.0 - 42.0 40.0 - 52.0	22 38
M75x1.5 M75x1.5 M75x1.5 M75x1.5	45.0 - 50.0 50.0 - 56.0 56.0 - 63.0 50.0 - 63.0	53 42 43 50									

¹⁾ The given torques (Md) were determined using test mandrels according to IEC EN 62444. The values relate to the pressure nut, the intermediate fitting (lower part of the cable gland) and the lock nut. If, at the time of installation of the intermediate fitting, it is unclear which sealing range will be facilitated, the highest value for the intermediate fitting should always be selected. In general, the following applies: tighten the parts until the torque specified in the table is reached OR the sealing insert bulges and protrudes slightly from the compression nut (see pictures).

²⁾ Applies also to Syntec® with antikink nozzle.

Installation torques - metric

EMC easyCONNECT			EMC po	werCONNE	Progress [®] GFK			Progress [®] multiLAYER			
Thread	Range	Md ₁₎	Thread	Range	Md ₁₎	Thread	Range	Md ₁₎	Thread	Range	Md ₁₎
	(mm)	(Nm)		(mm)	(Nm)		(mm)	(Nm)		(mm)	(Nm)
									M20x1.5	Metal 4.0 - 5.5	7/3
						M8x1.25 M8x1.25	2.5 - 3.5 3.0 - 5.0	1	M20x1.5 M20x1.5	5.5 7.5 7.5 11.0	7/4 7/5
						IVIOX 1.23	3.0 - 5.0	- 1	M20x1.5	11.0 15.0	7/5 7/5
						M10x1.5 M10x1.5	3.0 - 4.0 4.0 - 6.0	1	M25x1.5	6.0 - 8.5	10/7.5
									M25x1.5	8.5 11.5	10/7.5
M12x1.5 M12x1.5	3.5 - 5.0 5.0 - 6.5	3 3				M12x1.5 M12x1.5	3.5 - 5.0 5.0 - 6.5	2	M25x1.5 M25x1.5	11.5 16.0 16.0 20.5	10/6.0 10/4.0
WITZXI.O	0.0 0.0					M12x1.5	6.5 - 8.0	2			
M16x1.5	6.0 - 10.5	3	M16x1.5	6.0 - 10.5	3	M16x1.5	4.5 - 6.0	5	M32x1.5 M32x1.5	10.0 - 13.0 13.0 16.5	12/8.5 12/7.5
W TOXT.O	0.0 10.0		WITOXI.O	0.0 10.0		M16x1.5	6.0 - 8.0	4	M32x1.5	16.5 21.0	12/5.5
						M16x1.5 M16x1.5	8.0 - 10.5 6.0 - 10.5	2	M32x1.5	21.0 25.5	12/4.0
						oxiio	0.0	_		0 11 11 0511	
M20x1.5	8.0 - 15.0	4	M20x1.5	8.0 - 15.0	5	M20x1.5	6.0 - 8.0	6	M20x1.5	Synthetic GFK 4.0 - 5.5	7/3
						M20x1.5	8.0 - 11.0	5	M20x1.5	5.5 7.5	7/2.7
						M20x1.5 M20x1.5	11.0 - 15.0 8.0 - 15.0	2 3	M20x1.5 M20x1.5	7.5 11.0 11.0 15.0	7/2 7/2
M25x1.5	12.5 - 20.5	6	M25x1.5	12.5 - 20.5	7	M25x1.5	9.5 - 12.5	6	M25x1.5	6.0 - 8.5	10/7.5
IVIZUX 1.U	12.5 - 20.5	O	IVIZUX 1.U	12.5 - 20.5	ı	M25x1.5	12.5 - 16.0	4	M25x1.5	8.5 11.5	10/6.5
						M25x1.5 M25x1.5	16.0 - 20.5 12.5 - 20.5	3 4	M25x1.5 M25x1.5	11.5 16.0 16.0 20.5	10/5.0 10/3.0
						IVIZJX 1.J		4			
M32x1.5	17.0 - 25.5	7	M32x1.5	17.0 - 25.5	7	M32x1.5 M32x1.5	14.0 - 17.0 17.0 - 21.0	5 4	M32x1.5 M32x1.5	10.0 - 13.0 13.0 16.5	12/8.0 12/7.0
						M32x1.5	21.0 - 25.5	3	M32x1.5	16.5 21.0	12/5.5
						M32x1.5	17.0 - 25.5	4	M32x1.5	21.0 25.5	12/3.0
M40x1.5	24.0 - 33.0	12	M40x1.5	24.0 - 33.0	10	M40x1.5	20.0 - 24.0	10			
						M40x1.5 M40x1.5	24.0 - 28.5 28.5 - 33.0	7 10			
						M40x1.5	24.0 - 33.0	9			
						M50x1.5	29.0 - 33.0	11			
						M50x1.5	33.0 - 37.0	12			
M50x1.5	33.0 - 42.0	22	M50x1.5	33.0 - 42.0	15	M50x1.5 M50x1.5	37.0 - 42.0 33.0 - 42.0	16 15			
						M63x1.5 M63x1.5	35.0 - 40.0 40.0 - 46.0	28 19			
M63v1 F	40.0 52.0	20	M63v1 5	40.0 52.0	22	M63x1.5	46.0 - 52.0	41			
M63x1.5	40.0 - 52.0	38	M63x1.5	40.0 - 52.0	32	M63x1.5	40.0 - 52.0	26			
			M75x1.5	50.0 63.0	34						

¹⁾ The given torques (Md) were determined using test mandrels according to IEC EN 62444. The values relate to the pressure nut, the intermediate fitting (lower part of the cable gland) and the lock nut. If, at the time of installation of the intermediate fitting, it is unclear which sealing range will be facilitated, the highest value for the intermediate fitting should always be selected. In general, the following applies: tighten the parts until the torque specified in the table is reached OR the sealing insert bulges and protrudes slightly from the compression nut (see pictures).



²⁾ Applies also to Syntec® with antikink nozzle.

	•		ı			1					
Progress [®] Metal with EPDM antikink nozzle			Syntec [®] Metal			Syntec [®] Synthetic			Pressure balance element		
Thread	Range (mm)	Md ₁₎ (Nm)	Thread	Range (mm)	Md ₁₎ (Nm)	Thread	Range (mm)	Md ₁₎ (Nm)	Thread	Md ₁₎ (Nm)	
				()	(11111)		()	(1 1111)		()	
M8x1.25	3.8 - 4.8	2									
M10x1.5	4.0 - 6.0	3									
									M		
M12x1.5	4.0 - 6.0	5	M12x1.5	1.5 - 5.0	2.2	M12x1.5 ₂₎	2.5 - 6.5	2	M12x1.5	3	
			M12x1.5	3.0 - 7.0	2.2						
M4Cod 5	00 00	•	MACHAE	0.0 0.0	۰.	M4C-4 F	0.0 0.0	2.5	M4C-4 F	-	
M16x1.5	6.0 - 8.8	9	M16x1.5 M16x1.5	2.0 - 6.0 4.5 - 10.0	3.5 4	M16x1.5 M16x1.5	2.0 - 6.0 4.5 - 10.0	3.5 3.5	M16x1.5	5	
						M16x1.5 ₂₎	4.0 8.0	2			
M20x1.5 M20x1.5	9.0 - 11.0 10.5 - 13.0	11 10	M20x1.5 M20x1.5	3.5 - 8.0 7.0 - 13.0	5.5 5.5	M20x1.5 M20x1.5	3.5 - 8.0 7.0 - 13.0	5.5 5.5	M20x1.5	7	
IVIZUX 1.5	10.5 - 15.0	10	IVIZUX 1.5	7.0 - 13.0	5.5	M20x1.5 M20x1.5 ₂₎	3.0 7.0	3			
						M20x1.5 ₂₎	5.5 12.0	4			
M25x1.5	13.0 - 16.5	31	M25x1.5	5.0 - 11.0	9	M25x1.5	5.0 - 11.0	8/6	Pg	3	
IVIZOX 1.5	13.0 - 10.3	31	M25x1.5	10.0 - 17.0	9	M25x1.5 M25x1.5	10.0 - 17.0	8/6	1	J	
			M32x1.5 M32x1.5	7.0 - 15.0 13.0 - 21.0	25 25	M32x1.5	17.0 - 25.0	7	9 11	5 5	
			IVISZX 1.5	13.0 - 21.0	25				11	5	
			M40x1.5	15.0 - 23.0	40	M40x1.5	22.0 - 33.0	10	13	7	
			M40x1.5	19.0 - 28.0	40						
			M50x1.5	20.0 - 29.0	40	M50x1.5	28.0 - 38.0	30			
			M50x1.5	25.0 - 35.0	40	IVIOUX 1.5	20.0 - 30.0	30			
			M63x1.5 M63x1.5	28.0 - 39.0 35.0 - 48.0	60 40	M63x1.5	32.0 - 44.0	25			
			M63x1.5	44.0 - 45.0	50						

¹⁾ The given torques (Md) were determined using test mandrels according to IEC EN 62444. The values relate to the pressure nut, the intermediate fitting (lower part of the cable gland) and the lock nut. If, at the time of installation of the intermediate fitting, it is unclear which sealing range will be facilitated, the highest value for the intermediate fitting should always be selected. In general, the following applies: tighten the parts until the torque specified in the table is reached OR the sealing insert bulges and protrudes slightly from the compression nut (see pictures).

²⁾ Applies also to Syntec® with antikink nozzle.

Installation torques - Pg

	ss [®] Metal		Progress [®] Metal for flat cables			Progress [®] Metal Multi Progress [®] GFK Multi			Progress [®] EMC Series 85		
Thread	Range (mm)	Md ₁₎ (Nm)	Thread	Range (mm)	Md ₁₎ (Nm)	Thread	Range (mm)	Md ₁₎ (Nm)	Thread	Range (mm)	Md ₁₎ (Nm)
Pg7 Pg7 Pg7 Pg9 Pg9	3.5 - 5.0 5.0 - 6.5 6.5 - 8.0 3.5 - 4.5 4.5 - 6.0	4 5 3 7 6	Pg9	7.3x2.5 - 9.0x4.2	6	Pg9 Pg9	2 x 2.0 - 3.0 2 x 2.5 - 4.0	6 5		` ,	
Pg9 Pg9 Pg9	6.0 - 8.0 8.0 - 10.5 6.0 - 10.5	5 3 4 8	Pa13/Pa16	10.5x2.5 - 13.0x5.0	10	Pg9	2 x 3.5 - 5.0 2 x 3.5 - 5.0	8	Pg11	6.0 - 10.5	6
Pg11 Pg11 Pg11	5.5 - 8.5 8.5 - 12.0 5.5 - 12.0	7 5 5	Pg13/Pg16	12.5x2.5 15.0x5.0	9	Pg11 Pg11 Pg11	2 x 4.5 - 6.0 2 x 5.5 - 7.0 3 x 3.5 - 5.0	7 7 5	Pg11	8.0 - 15.0	5
Pg13 Pg13 Pg13 Pg13	6.0 - 8.0 8.0 - 11.0 11.0 - 15.0 8.0 - 15.0	9 5 5	Pg21	16.0x4.0 - 19.0x7.0	10	Pg13/Pg16 Pg13/Pg16 Pg13/Pg16 Pg16 Pg13/Pg16	2 x 3.5 - 5.0 2 x 4.5 - 6.0 2 x 5.5 - 7.5 2 x 6.7 - 9.0 3 x 3.5 - 5.0	9 5 5 5			
Pg16 Pg16 Pg16 Pg16	6.0 - 8.0 8.0 - 11.0 11.0 - 15.0 8.0 - 15.0	10 9 5 5	Pg21 Pg21	19x3.0 - 22.0x6.0 19.0x5.0 22.0x8.0	4	Pg13/Pg16 Pg13 Pg16 Pg13/Pg16 Pg13/Pg16	3 x 4.5 - 6.0 3 x 5.2 - 6.5 3 x 5.0 - 7.0 4 x 3.5 - 5.0 4 x 4.5 - 6.0	5 5 5 5	Pg16 Pg16	8.0 - 15.0 12.5 - 20.5	5 7
Pg21 Pg21 Pg21 Pg21	9.5 - 12.5 12.5 - 16.0 16.0 - 20.5 12.5 - 20.5	10 10 4 7	Pg29 Pg29 Pg29 Pg29 Pg29	25.0x3.0 - 28.0x6.0 30.0x3.5 33.0x6.5 23.0x4.0 26.0x7.0 23.5x6.0 26.5x9.0 29.0x6.0 32.0x9.0	9 9 8 9	Pg13/Pg16 Pg21 Pg21 Pg21 Pg21	4 x 5.5 - 7.0 2 x 5.0 - 7.0 2 x 6.7 - 9.0 2 x 7.7 - 10.0	5 8 10 5	Pg21 Pg21	12.5 - 20.5 17.0 - 25.5	7 6
Pg29 Pg29 Pg29 Pg29	16.0 - 19.0 19.0 - 23.0 23.0 - 27.5 19.0 - 27.5	10 8 8 8	Pg29 Pg42 Pg42 Pg42 Pg42	27.0x7.0 30.0x10.0 36.5x2.5 40.0x6.0 34.0x4.0 - 37.0x7.0 31.0x8.5 34.0x11.5	9 14 14 11	Pg21 Pg21 Pg21 Pg21 Pg21	3 x 5.5 - 7.0 3 x 6.8 - 9.0 3 x 8.5 - 10.0 4 x 5.5 - 7.0 4 x 7.0 - 9.0	4 4 4 4 4	Pg29 Pg29	17.0 - 25.5 24.0 - 33.0	7 12
Pg36 Pg36 Pg36 Pg36	21.5 - 26.0 26.0 - 30.5 30.5 - 35.0 26.0 - 35.0	12 12 12 15	Pg42 Pg42 Pg48 Pg48	36.5x10.0 40.0x13.5 38.5x10.0 42.0x14.0 42.0x10.0 - 46.0x14.0 42.5x2.0 46.5x6.0	14 14 32 34	Pg21 Pg29	6 x 4.8 - 6.0 3 x 7.5 - 9.0	10			
Pg42 Pg42 Pg42 Pg42	29.0 - 33.0 33.0 - 37.0 37.0 - 42.0 33.0 - 42.0	11 14 14 22									
Pg48 Pg48 Pg48 Pg48	32.0 - 37.0 37.0 - 43.0 43.0 - 49.0 37.0 - 49.0	40 40 35 40									

¹⁾ The given torques (Md) were determined on the basis of IEC EN 62444 using test mandrels. The values relate to the pressure nut, the intermediate fitting (lower part of the cable gland) and the lock nut. If, at the time of installation of the intermediate fitting, it is unclear which sealing range will be facilitated, the highest value for the intermediate fitting should always be selected. In general, the following applies: tighten the parts until the torque specified in the table is reached OR the sealing insert bulges and protrudes slightly from the compression nut (see pictures).



²⁾ Applies also to Syntec® with antikink nozzle.

Progre Thread	ss [®] GFK Range	Md ₁₎	_	ss [®] Metal v antikink no Range		Syntec [©]	[®] Metal Range	Md 1)	Syntec ^o	[®] Synthetic Range	Md 1)
Tillodd	(mm)	(Nm)		(mm)	(Nm)	1111000	(mm)	(Nm)	Tilloud	(mm)	(Nm)
Pg7 Pg7 Pg7	3.5 - 5.0 5.0 - 6.5 6.5 - 8.0	2 3 2	Pg7	4.0 - 6.0	5	Pg7 Pg7	1.5 - 5.0 3.0 - 7.0	2.2 2.2	Pg7 ₂₎	2.5 - 6.5	2
			Pg9	6.0 - 8.8	9	Pg9	2.0 - 6.0	3.5	Pg9 ₂₎	3.0 - 8.0	2.5
Pg9 Pg9 Pg9 Pg9	4.5 - 6.0 6.0 - 8.0 8.0 - 10.5 6.0 - 10.5	5 4 2 2	Ü			Pg9	4.5 - 10.0	4	C 2,		
Pg11	4.0 - 5.5	5	Pg11	6.0 - 8.8	9	Pg11	3.5 8.0	5.5	Pg11 ₂₎	2.0 - 7.0	5
Pg11 Pg11 Pg11	5.5 - 8.5 8.5 - 12.0 5.5 - 12.0	4 2 2				Pg11	7.0 13.0	5.5	Pg11 ₂₎	4.0 - 10.0	6
Pg13	6.0 - 8.0	6	Pg13	9.0 - 11.0	11	Pg13	3.5 - 8.0	5.5	Pg13 ₂₎	3.0 - 7.0	3
Pg13 Pg13 Pg13	8.0 - 11.0 11.0 - 15.0 8.0 - 15.0	5 2 3	Pg13	10.5 - 13.0	10	Pg13	7.0 - 13.0	5.5	Pg13 ₂₎	5.5 - 12.0	4
Pg16	6.0 - 8.0	6	Pg16	9.0 - 11.0	11	Pg16	5.0 11.0	9	Pg16 ₂₎	5.0 - 11.0	8/6
Pg16 Pg16 Pg16	8.0 - 11.0 11.0 - 15.0 8.0 - 15.0	5 2 3	Pg16	10.5 - 13.0	10	Pg16	7.0 13.0	9	Pg16 ₂₎	8.5 - 14.0	8
Pg21 Pg21	9.5 - 12.5 12.5 - 16.0	6 4	Pg21	13.0 - 16.5	31	Pg21 Pg21	7.0 - 15.0 10.0 - 17.0	25 25	Pg21 Pg21	6.5 - 14.0 11.0 - 18.0	6.5 10
Pg21 Pg21	16.0 - 20.5 12.5 - 20.5	3 4				Ū			·		
Pg29 Pg29	16.0 - 19.0 19.0 - 23.0	8 8				Pg29 Pg29	15.0 - 23.0 19.0 28.0	40 40	Pg29	17.0 - 25.0	7
Pg29 Pg29	23.0 - 27.5 19.0 - 27.5	10 10									
Pg36 Pg36	21.5 - 26.0 26.0 - 30.5	10 10				Pg36 Pg36	20.0 - 29.0 25.0 35.0	40 40	Pg36	22.0 - 33.0	10
Pg36 Pg36	30.5 - 35.0 26.0 - 35.0	10 12									
Pg42 Pg42 Pg42 Pg42	29.0 - 33.0 33.0 - 37.0 37.0 - 42.0 33.0 - 42.0	11 12 16 15				Pg42 Pg42	20.0 - 29.0 25.0 35.0	40 40	Pg42	28.0 - 38.0	23
Pg48 Pg48	32.0 - 37.0 37.0 - 43.0	28 25				Pg48 Pg48	28.0 - 39.0 35.0 48.0	60 40	Pg48	32.0 - 44.0	25
Pg48 Pg48	43.0 - 49.0 37.0 - 49.0	40 40				310	70.0				

¹⁾ The given torques (Md) were determined on the basis of IEC EN 62444 using test mandrels. The values relate to the pressure nut, the intermediate fitting (lower part of the cable gland) and the lock nut. If, at the time of installation of the intermediate fitting, it is unclear which sealing range will be facilitated, the highest value for the intermediate fitting should always be selected. In general, the following applies: tighten the parts until the torque specified in the table is reached OR the sealing insert bulges and protrudes slightly from the compression nut (see pictures).



²⁾ Applies also to Syntec® with antikink nozzle.