



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx IMQ 16.0002X Issue No: 0 Certificate history:
Issue No. 0 (2016-04-04)

Status: **Current** Page 1 of 4

Date of Issue: **2016-04-04**

Applicant: **Atex S.r.l.**
via del Tecchione 36/B
20098 San Giuliano Milanese (MI)
Italy

Electrical Apparatus: **Metal cable glands for circular and flat cables serie PNA...; PNAF.....;
PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...;
PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb);
PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)**

Optional accessory:

Type of Protection: **Ex d; Ex e; Ex tb**

Marking:
Ex d IIC Gb
Ex e IIC Gb
Ex tb IIIC Db IP66/68

Approved for issue on behalf of the IECEx
Certification Body:

Mr. Mauro CASARI

Position:

IMQ ExCB Manager

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Istituto Italiano del Marchio di Qualità S.p.A
Via Quintiliano 43
20138 Milano,
Italy





IECEX Certificate of Conformity

Certificate No: IECEx IMQ 16.0002X Issue No: 0
Date of Issue: **2016-04-04** Page 2 of 4
Manufacturer: **Atex S.r.l.**
via del Tecchione 36/B
20098 San Giuliano Milanese (MI)
Italy

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[IT/IMQ/ExTR16.0002/00](#)

Quality Assessment Report:

[NO/DNV/QAR13.0003/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The cable glands series PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS..... are suitable for inserting circular cables into Ex d enclosures having threaded entries and Ex e or Ex tb enclosures having either threaded or plane entries.

The cable glands series PNAN... are suitable for inserting circular cables into Ex e or Ex tb enclosures having either threaded or plane entries.

The cable glands series PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb) are suitable for inserting flat cables into Ex e or Ex tb enclosures having either threaded or plane entries.

Cable glands are suitable for not-armoured cables, and are made of metal body (aluminium; stainless steel; brass; galvanized steel; nickel plated brass). Sealing rings are made of silicon or neoprene (chloroprene) for all types, except for PNAN... type in which sealing rings are made of silicone or EPDM rubber.

To guarantee the IP 66/68 degree of protection the cable glands with cylindrical threads have a sealing edge machined for fitting an elastomeric gasket, while for all other threads the IP66/68 degree of protection is achieved with sealant put at least on two complete threads engaged of the threaded coupling.

Cable glands are suitable for electrical equipment either with type of protection Ex e, Ex d or type of protection Ex t, suitability for each model is shown in following tables. Cable glands should be also used for intrinsically safe circuits Ex i. These cable glands shall have a light blue painted part.

Cable glands for circular cables can be supplied with tap, commercial called "dome plug", polyamide made, as accessory (DPX--21), suitable to guarantee IP degree when installed according to manufacturer's instructions.

Cable glands are suitable for cable type where sealing and retention is required by gripping the outer sheath (including armoured/screened/braided cables when the armour/screen/braid is clamped inside the terminating equipment)

CONDITIONS OF CERTIFICATION: YES as shown below:

- The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting
 - The coupling of the cable glands to the enclosure and torque values of cap clamping shall be made as indicated by the manufacturer in the documents annexed to this certificate in order to respect the type of protection of the electrical apparatus on which cable glands are mounted.
 - The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
 - The cable gland installation shall be done in such a way that the temperature at the mounting point will remain within the service temperature ranges declared in this certificate.
 - When cable glands are installed with polyamide insert DPX--21, mechanical risk have to be taken into account, depending on cable gland and insert tap. The upper operating temperature is limited to 70 °C. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones (original spare parts only). Precautions shall be taken in order to guarantee protection against risk of mechanical damage is provided, when insert taps are suitable for low mechanical risk (4J) only.
 - Cable glands for non circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.

Annex:



IECEX Certificate of Conformity

Certificate No: IECEx IMQ 16.0002X

Issue No: 0

Date of Issue: **2016-04-04**

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Annex to: IECEx IMQ 16.0002X issue No. 0
Applicant: Atex S.r.l.
Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...;
PNALQ...; PNALN...; PNAFS.....; PNAN...
PNA...(axb); PNAF.....(axb); PNAC...(axb);
PNAS...(axb); PNALS...(axb); PNALQ...(axb);
PNALN...(axb); PNAFS.....(axb)



General description

The cable glands series PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS..... are suitable for inserting circular cables into Ex d enclosures having threaded entries and

Ex e or Ex tb enclosures having either threaded or plane entries.

The cable glands series PNAN... are suitable for inserting circular cables into Ex e or Ex tb enclosures having either threaded or plane entries.

The cable glands series PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb) are suitable for inserting flat cables into Ex e or Ex tb enclosures having either threaded or plane entries.

Cable glands are suitable for not-armoured cables, and are made of metal body (aluminium; stainless steel; brass; galvanized steel; nickel plated brass). Sealing rings are made of silicon or neoprene (chloroprene) for all types, except for PNAN... type in which sealing rings are made of silicone or EPDM rubber. Details in Table 2.

To guarantee the IP 66/68 degree of protection the cable glands with cylindrical threads have a sealing edge machined for fitting an elastomeric gasket, while for all other threads the IP66/68 degree of protection is achieved with sealant put at least on two complete threads engaged of the threaded coupling.

Cable glands are suitable for electrical equipment either with type of protection Ex e, Ex d or type of protection Ex t, suitability for each model is shown in following tables. Cable glands should be also used for intrinsically safe circuits Ex i. These cable glands shall have a light blue painted part.

Cable glands for circular cables can be supplied with tap, commercial called "dome plug", polyamide made, as accessory (DPX--21), suitable to guarantee IP degree when installed according to manufacturer's instructions. Details in Table 5.

Cable glands are suitable for cable type where sealing and retention is required by gripping the outer sheath (including armoured/screened/braided cables when the armour/screen/braid is clamped inside the terminating equipment)

Annex to: IECEx IMQ 16.0002X issue No. 0
Applicant: Atex S.r.l.
Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...;
PNALQ...; PNALN...; PNAFS.....; PNAN...
PNA...(axb); PNAF.....(axb); PNAC...(axb);
PNAS...(axb); PNALS...(axb); PNALQ...(axb);
PNALN...(axb); PNAFS.....(axb)



Conditions of use

- The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting
- The coupling of the cable glands to the enclosure and torque values of cap clamping shall be made as indicated by the manufacturer in the documents annexed to this certificate in order to respect the type of protection of the electrical apparatus on which cable glands are mounted.
- The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
- The cable gland installation shall be done in such a way that the temperature at the mounting point will remain within the service temperature ranges declared in this certificate.
- When cable glands are installed with polyamide insert DPX-.-21, mechanical risk have to be taken into account, depending on cable gland and insert tap. The upper operating temperature is limited to 70 °C. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones (original spare parts only). Precautions shall be taken in order to guarantee protection against risk of mechanical damage is provided, when insert taps are suitable for low mechanical risk (4J) only.
- Cable glands for non circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.

Annex to: IECEx IMQ 16.0002X issue No. 0
 Applicant: Atex S.r.l.
 Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...;
 PNALQ...; PNALN...; PNAFS.....; PNAN...
 PNA...(axb); PNAF.....(axb); PNAC...(axb);
 PNAS...(axb); PNALS...(axb); PNALQ...(axb);
 PNALN...(axb); PNAFS.....(axb)



Design options

Serie:	Ex e – Ex tb execution	Ex d execution
PNA...	neoprene sealing ring: -40°C ÷ +80°C silicone sealing ring: -60°C ÷ +140°C	neoprene sealing ring: -40°C ÷ +80°C silicone sealing ring: -60°C ÷ +80°C
PNAF.....		
PNAC...		
PNAS...		
PNALS...		
PNALQ...		
PNALN...		
PNAFS.....		
PNAN...	EPDM sealing ring: -40°C ÷ +80°C silicone sealing ring: -60°C ÷ +80°C	Not possible
PNA...(axb)	silicone sealing ring: -60°C ÷ +140°C	Not possible
PNAF.....(axb)		
PNAC...(axb)		
PNAS...(axb)		
PNALS...(axb)		
PNALQ...(axb)		
PNALN...(axb)		
PNAFS.....(axb)		

Series	Body materials	Sealing rings material	Flat washer materials	O-ring	Accessories
PNA...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNAF.....	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNAC...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNAS...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNALS...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNALQ...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNALN...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNAFS.....	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNAN...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	EPDM rubber silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer dome plug
PNA...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer
PNAF.....(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer
PNAC...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer

Annex to: IECEx IMQ 16.0002X issue No. 0

Applicant: Atex S.r.l.

Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...



PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)

Table 2: Materials¹

Series	Body materials	Sealing rings material	Flat washer materials	O-ring	Accessories
PNAS...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer
PNALS...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer
PNALQ...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer
PNALN...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer
PNAFS.....(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM rubber	serrated washer

¹ Service temperature is related to material of sealing rings which cable glands body is made of, but can be additionally limited by material of flat washer/OR/accessories material temperature limitations: chloroprene (-40÷100 °C); silicone (-60÷180 °C); EPDM rubber (-40÷110 °C); KLINGERSIL® C-4400 fiber (-50÷130 °C); NBR (-40÷100 °C), PA (-60÷65 °C). The use of these materials has to be taken into account in determination of lower and upper limit of service temperature of cable glands.

Key code:

PNA	(1)	(2)	(3)	(1): size, according to related table (2): thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (ISO 965/1 and ISO 965/3) "P" – PG DIN 40430 (Ex e only) "C" – GAS UNI ISO 228/1 "S" – N.P.S.M. "G" – GAS UNI ISO 7/1 "K" – GAS Gk UNI 6125 (for Ex e only) (3): body material: "B" – brass "BN" - Nickel Plated Brass "X" – stainless steel "A" – aluminium "Z" - Galvanized Steel
PNAC	(1)	(2)	(3)	
PNAS	(1)	(2)	(3)	
PNALS	(1)	(2)	(3)	
PNALQ	(1)	(2)	(3)	
PNALN	(1)	(2)	(3)	
PNAN	(1)	(2)	(3)	

PNAF	(1)	(2)	(3)	(4)	(5)	(1): male size, according to related table (2): male thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (EN 60423) (3): female size, according to related table (4): female thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (EN 60423) (5): body material: "B" – brass "BN" - Nickel Plated Brass "X" – stainless steel "A" – aluminium "Z" - Galvanized Steel
PNAFS	(1)	(2)	(3)	(4)	(5)	

Annex to: IECEx IMQ 16.0002X issue No. 0

Applicant: Atex S.r.l.

Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...



PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)

PNA	(1)	(2)	(3)	(axb)	(1): size, according to related table
PNAC	(1)	(2)	(3)	(axb)	(2): thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (ISO 965/1 and ISO 965/3) "P" – PG DIN 40430 (Ex e only) "C" – GAS UNI ISO 228/1 "S" – N.P.S.M. "G" – GAS UNI ISO 7/1 "K" – GAS Gk UNI 6125 (for Ex e only)
PNAS	(1)	(2)	(3)	(axb)	
PNALS	(1)	(2)	(3)	(axb)	
PNALQ	(1)	(2)	(3)	(axb)	
PNALN	(1)	(2)	(3)	(axb)	
PNALN	(1)	(2)	(3)	(axb)	
					(3): body material: "B" – brass "X" – stainless steel "A" – aluminium "BN" - Nickel Plated Brass "Z" - Galvanized Steel
					(axb): flat sealing ring hole dimensions

						(1): male size, according to related table	
PNAF	(1)	(2)	(3)	(4)	(5)	(axb)	(2): male thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (EN 60423)
							(3): female size, according to related table
PNAFS	(1)	(2)	(3)	(4)	(5)	(axb)	(4): female thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (EN 60423)
							(5): body material: "B" – brass "X" – stainless steel "A" – aluminium "BN" - Nickel Plated Brass "Z" - Galvanized Steel
							(axb): flat sealing ring hole dimensions

Annex to: IECEx IMQ 16.0002X issue No. 0

Applicant: Atex S.r.l.

Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...



PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)

Cable gland sizes:

Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for	
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb
PNA 0XS..	2-4	-	-	4	no	yes
PNA 0S..	4-8	20	18	-	no	yes
PNA01S..	3-9	-	25	18	yes	yes
PNA 01..	4-12	20	18	16	yes	yes
PNA 1S..	3-9	-	25	18	yes	yes
PNA 1..	4-12	20	18	15	yes	yes
PNA 12..	10-16	24	22	18	yes	yes
PNA 2..	10-18	25	22	18	yes	yes
PNA 23..	14-20	26	22	-	yes	yes
PNA 3..	14-24	28	23	20	yes	yes
PNA 34..	22-28	45	40	35	yes	yes
PNA 4..	22-32	56	50	45	yes	yes
PNA 45..	26-34	57	55	52	yes	yes
PNA 5..	26-35	57	55	52	yes	yes
PNA 56..	35-44	190	155	140	yes	yes
PNA 6..	35-45	190	155	140	yes	yes
PNA 67..	46-56	160	145	135	yes	yes
PNA 7..	46-62	185	175	150	yes	yes
PNA 78..	60-70	123	118	110	yes	yes
PNA 8..	60-70	123	118	110	yes	yes
PNA 810..	75-85	135	130	125	yes	yes
PNA 10..	75-85	135	130	125	yes	yes
PNA 11..	85-95	180	175	170	yes	yes

Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for		
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb	
PNAF 0S.0S..	-	4-8	20	18	-	no	yes
PNAF 0S.01..	-	4-8	20	18	-	no	yes
PNAF 01.0S..	-	4-8	20	18	-	yes	yes
PNAF 01.01..	PNAFS 01.01..	4-12	20	18	16	yes	yes
PNAF 01.12..	PNAFS 01.12..	4-12	20	18	16	yes	yes
PNAF 12.01..	PNAFS 12.01..	4-12	24	22	18	yes	yes
PNAF 1.1..	PNAFS 1.1..	4-12	20	18	15	yes	yes
PNAF 12.12..	PNAFS 12.12..	10-16	24	22	18	yes	yes
PNAF 12.23..	PNAFS 12.23..	10-16	24	22	18	yes	yes
PNAF 23.12..	PNAFS 23.12..	10-16	26	22	18	yes	yes
PNAF 2.2..	PNAFS 2.2..	10-18	25	22	18	yes	yes
PNAF 23.23..	PNAFS 23.23..	14-20	26	22	-	yes	yes
PNAF 23.34..	PNAFS 23.34..	14-20	26	22	-	yes	yes
PNAF 34.23..	PNAFS 34.23..	14-20	45	40	-	yes	yes
PNAF 3.3..	PNAFS 3.3..	14-24	28	23	20	yes	yes
PNAF 34.34..	PNAFS 34.34..	22-28	45	40	35	yes	yes
PNAF 34.45..	PNAFS 34.45..	22-28	45	40	35	yes	yes
PNAF 45.34..	PNAFS 45.34..	22-28	57	55	52	yes	yes
PNAF 4.4..	PNAFS 4.4..	22-32	56	50	45	yes	yes
PNAF 45.45..	PNAFS 45.45..	26-34	57	55	52	yes	yes
PNAF 45.56..	PNAFS 45.56..	26-34	57	55	52	yes	yes
PNAF 56.45..	PNAFS 56.45..	26-34	190	155	140	yes	yes
PNAF 5.5..	PNAFS 5.5..	26-35	57	55	52	yes	yes
PNAF 5.45..	PNAFS 5.45..	26-34	57	55	52	yes	yes
PNAF 56.56..	PNAFS 56.56..	35-44	190	155	140	yes	yes

Annex to: IECEx IMQ 16.0002X issue No. 0

Applicant: Atex S.r.l.

Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...



PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)

Model		Min-max cable Ø mm	Torque value [Nm]			Suitable for	
			S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb
PNAF 56.67..	PNAFS 56.67..	35-44	190	155	140	yes	yes
PNAF 67.56..	PNAFS 67.56..	35-44	160	145	135	yes	yes
PNAF 6.6..	PNAFS 6.6..	35-45	190	155	140	yes	yes
PNAF 67.67..	PNAFS 67.67..	46-56	160	145	135	yes	yes
PNAF 67.78..	PNAFS 67.78..	46-56	160	145	135	yes	yes
PNAF 78.67..	PNAFS 78.67..	46-56	123	118	135	yes	yes
PNAF 7.7..	PNAFS 7.7..	46-62	185	175	150	yes	yes
PNAF 78.78..	PNAFS 78.78..	60-70	123	118	-	yes	yes
PNAF 78.810..	PNAFS 78.810..	60-70	123	118	-	yes	yes
PNAF 810.78..	PNAFS 810.78..	60-70	135	130	-	yes	yes
PNAF 8.8..	PNAFS 8.8..	60-75	123	118	110	yes	yes
PNAF 810.810..	PNAFS 810.810..	75-82	135	130	125	yes	yes
PNAF 810.10..	PNAFS 810.10..	75-82	135	130	125	yes	yes
PNAF 11.810..	PNAFS 11.810..	75-82	180	175	170	yes	yes
PNAF 10.10..	PNAFS 10.10..	75-85	135	130	125	yes	yes
PNAF 10.810..	PNAFS 10.810..	75-82	135	130	125	yes	yes
PNAF 10.11..	PNAFS 10.11..	75-85	135	130	125	yes	yes
PNAF 11.10..	PNAFS 11.10..	75-85	180	175	170	yes	yes
PNAF 11.11..	PNAFS 11.11..	85-95	180	175	170	yes	yes

Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for	
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb
PNAC 0S..	4-8	20	18	-	no	yes
PNAC 01S..	3-9	-	25	18	yes	yes
PNAC 01..	4-12	20	18	16	yes	yes
PNAC 1S..	3-9	-	25	18	yes	yes
PNAC 1..	4-12	20	18	15	yes	yes
PNAC 12..	10-16	24	22	18	yes	yes
PNAC 2..	10-18	25	22	18	yes	yes
PNAC 23..	14-20	26	22	-	yes	yes
PNAC 3..	14-24	28	23	20	yes	yes
PNAC 34..	22-28	45	40	35	yes	yes
PNAC 4..	22-32	56	50	45	yes	yes
PNAC 45..	26-34	57	55	52	yes	yes
PNAC 5..	26-35	57	55	52	yes	yes
PNAC 56..	35-44	190	155	140	yes	yes
PNAC 6..	35-45	190	155	140	yes	yes
PNAC 7..	46-59	185	175	150	yes	yes

Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for	
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb
PNAS 01S.	4-8	-	25	18	yes	yes
PNAS 01..	4-8	-	18	15	yes	yes
PNAS 1..	4-12	20	18	15	yes	yes
PNAS 2..	10-18	25	22	18	yes	yes
PNAS 3..	14-24	25	20	18	yes	yes
PNAS 4..	22-32	56	50	45	yes	yes
PNAS 5..	26-35	57	55	52	yes	yes
PNAS 6..	35-45	190	155	140	yes	yes
PNAS 7..	46-62	185	175	150	yes	yes
PNAS 8..	60-75	123	118	110	yes	yes

Annex to: IECEx IMQ 16.0002X issue No. 0

Applicant: Atex S.r.l.

Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...



PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)

Table 3.5: PNALN ...; PNALS ...; PNALQ ...

Model			Min-max cable Ø mm	Torque value [Nm]			Suitable for	
				S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb
PNALN 02..	PNALS 02..	PNALQ 02..	4-8	20	18	-	no	yes
PNALN 01..	PNALS 01..	PNALQ 01..	4-12	20	18	16	yes	yes
PNALN 1S..	PNALS 1S..	PNALQ 1S..	4-10	20	18	15	yes	yes
PNALN 1..	PNALS 1..	PNALQ 1..	4-12	20	18	15	yes	yes
PNALN 2..	PNALS 2..	PNALQ 2..	10-18	25	22	18	yes	yes
PNALN 3..	PNALS 3..	PNALQ 3..	14-24	28	23	20	yes	yes
PNALN 4..	PNALS 4..	PNALQ 4..	22-32	56	50	45	yes	yes
PNALN 5..	PNALS 5..	PNALQ 5..	26-35	57	55	52	yes	yes

Table 3.6: PNAN ...

Model	Min-max cable Ø mm	Torque value [Nm]		Suitable for	
		S1+S2 double sealing ring	S1 single sealing ring	Ex d	Ex e Ex tb
PNAN 0XS..	4-7	-	4	no	yes
PNAN 01S..	5-8	-	8	no	yes
PNAN 1..	8-14	10	10	no	yes
PNAN 2..	10-16	12	12	no	yes
PNAN 3..	16-21	13	13	no	yes
PNAN 4..	18-27	25	25	no	yes
PNAN 5..	26-35	33	33	no	yes
PNAN 6..	32-49	45	35	no	yes

Table 4.1: PNA ... (axb)

Model	Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
			Ex d	Ex e Ex tb
PNA 1S..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
PNA 1..(axb)		16	no	yes
PNA 12..(axb)		16	no	yes
PNA 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
PNA 23..(axb)		18	no	yes

Table 4.2: PNAF ... (axb); PNAFS ... (axb)

Model		Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
				Ex d	Ex e Ex tb
PNAF 12.01..(axb)	PNAFS 12.01..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
PNAF 1.1..(axb)	PNAFS 1.1..(axb)		16	no	yes
PNAF 12.12..(axb)	PNAFS 12.12..(axb)		16	no	yes
PNAF 12.23..(axb)	PNAFS 12.23..(axb)		16	no	yes
PNAF 23.12..(axb)	PNAFS 23.12..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
PNAF 2.2..(axb)	PNAFS 2.2..(axb)		18	no	yes
PNAF 23.23..(axb)	PNAFS 23.23..(axb)		18	no	yes
PNAF 23.34..(axb)	PNAFS 23.34..(axb)		18	no	yes

Table 4.3: PNAC ... (axb)

Model	Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
			Ex d	Ex e Ex tb
PNAC 1S..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
PNAC 1..(axb)		16	no	yes
PNAC 12..(axb)		16	no	yes
PNAC 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
PNAC 23..(axb)		18	no	yes

Annex to: IECEx IMQ 16.0002X issue No. 0

Applicant: Atex S.r.l.

Apparatus: PNA...; PNAF.....; PNAC...; PNAS...; PNALS...; PNALQ...; PNALN...; PNAFS.....; PNAN...

PNA...(axb); PNAF.....(axb); PNAC...(axb); PNAS...(axb); PNALS...(axb); PNALQ...(axb); PNALN...(axb); PNAFS.....(axb)



Table 4.4: PNAS ... (axb)

Model	Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
			Ex d	Ex e Ex tb
PNAS 1..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
PNAS 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes

Table 4.5: PNALN ... (axb); PNALS ... (axb); PNALQ ... (axb)

Model			Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
PNALN 1S..(axb)	PNALS 1S..(axb)	PNALQ 1S..(axb)			Ex d	Ex e Ex tb
PNALN 1..(axb)	PNALS 1..(axb)	PNALQ 1..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
PNALN 2..(axb)	PNALS 2..(axb)	PNALQ 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes

Table 5: DPX--21

From size to size	Material	Mechanical risk
M12/PG7/PF 1/4"/ NPT1/4"	M32/PG21/PF 1"/ NPT 1"	polyamide	High (7J)
M32/PG21/PF 1"/ NPT 1"	M63/PG48/PF 2"/ NPT 2"		High (7J) at T≥-40°C Low (4J) at T<-40°C

Table 6: Flat sealing ring details

Sealing ring type	Sealing ring dimensions [mm x mm]	Cable min [mm x mm]	Cable max [mm x mm]	Sealing ring type	Sealing ring dimensions [mm x mm]	Cable min [mm x mm]	Cable max [mm x mm]
FxA1	5 x 12,2	5 x 10	5,75 x 12,2	FxA2	5 x 12,8	5 x 10,4	5,5 x 14
FxB1	6 x 8,5	5,75 x 8,5	6 x 10	FxB2	6 x 8,5	5,75 x 8,5	6 x 10
FxC1	5,5 x 11,7	5,3 x 11,3	5,5 x 11,7	FxC2	5,5 x 11,7	5,3 x 11,3	5,5 x 11,7
FxD1	6 x 12,2	5,3 x 11,3	6,5 x 14,5	FxD2	6 x 14	5,5 x 12	6,5 x 14,5
FxE1	6,3 x 10,8	5,3 x 11,3	6,3 x 10,8	FxE2	9,1 x 12,3	7 x 10	9,1 x 12,3
FxG1	6,7 x 12,7			FxF2	7,35 x 13,4	5,6 x 10	9 x 14
-	-	-	-	FxG2	6,8 x 15,3	6,5 x 14,8	6,8 x 15,3
-	-	-	-	FxH2	5,5 x 10,7	5,2 x 10	7 x 12