

EX CABLE GLANDS





Installation: hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)
Classification: Group II - Category 2G 2D



REFERENCE STANDARDS

Directive 2014/34/EU

EXECUTION	⊗ II 2 G Ex d / Exe / Exia IIC Gb ⊗ II 2 D Ex tb IIIC Db
RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-31
EC Type-Examination Certificate	INERIS 03 ATEX 0140X
PROTECTION DEGREE	IP66 or IP66/68
AMBIENT TEMPERATURE	-40°C ÷ +90°C (Rubber rings EPDM-60) -60°C ÷ +180°C (Rubber rings SILICON)
OTHER AVAILABLE CERTIFICATES	IECEX: IECEX INE 11.0013X INMETRO: CEPEL 12.2176X EAC: TC RU C-IT.Г508.B.02646 (-75°C ÷ +180°C) RINA: ELE137217CS004 RUSSIAN MARINE CERTIFICATE (RMRS): 19.02549.280 Kc (Korean certification): 14-KB4B0- (from 0427X to 0444X) CCOE-PESO: P405708/7

Mechanical characteristics

Body / cap	OT-58 marine brass (ON) - AISI-316L stainless steel (IX) marine grade copper free aluminium (on project request only)
Finishes	full nickel plating treatment (brass material only)
Rubber rings	EPDM rubber 50-60 shore hardness (standard supply) Silicon rubber 60 shore hardness (on demand only)
O-ring	silicon rubber - 60 shore hardness
Skid washer	nylon 6.0
Chamber for sealing	OT-58 marine brass ("R" version only)

Applications

- For steel wire armoured cables (swa) for steel tape armoured cables and for lead inner sheath cables
- Double Compression Type For Indoor And Outdoor Use
- Provided armour clamping using clamping arrangements suitable for all armour wire/braid types
- Internal lead device for electrical bond of cable lead inner sheath
- Double compression - under armour and overall of armour cable (inner and outer sealing)
- Sealing with proper resin into "chamber of sealing" (on barrier type version "r" only)



On Request Accessories:

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing (See DL-NW-PTD-ET bulletin)

Cable gland selection table

CODE (1)	SIZE	ENTRY THREAD SIZE			DIA. UNDER ARMOUR		OUTER SHEATH DIA.		HEXAGON [mm]	MATERIAL						
		METRIC (2)	NPT (2)	ISO 228 (2)	min [mm]	max [mm]	min [mm]	max [mm]		(3)	(3)					
PAPD PAPD-R	11	(20) ISO-M20 (1) 1/2"	M	1/2"NPT	N	1/2"	G	3,5	6,0	10,0	15,0	32,0	NICKEL PL.BRASS	ONK		
								6,0	8,5				14,0	19,0	STAINLESS STEEL	XK
								8,5	11,0							
PAPD PAPD-R	21	(25) ISO-M25 (2) 3/4"	M	3/4"NPT	N	3/4"	G	8,5	11,0	15,0	20,0	36,0	NICKEL PL.BRASS	ONK		
								11,0	13,5				19,0	24,0	STAINLESS STEEL	XK
								13,5	16							
PAPD PAPD-R	31	(32) ISO-M32 (3) 1"	M	1"NPT	N	1"	G	13,0	16,0	20,0	26,0	45,0	NICKEL PL.BRASS	ONK		
								16,0	19,0				25,0	31,0	STAINLESS STEEL	XK
								19,0	22,0							
PAPD PAPD-R	41	(40) ISO-M40 (4) 1 1/4"	M	1 1/4"NPT	N	1 1/4"	G	19,0	22,0	26,0	32,0	53,0	NICKEL PL.BRASS	ONK		
								22,0	25,0				31,0	37,0	STAINLESS STEEL	XK
								25,0	28,0							
PAPD PAPD-R	51	(50) ISO-M50 (5) 1 1/2"	M	1 1/2"NPT	N	1 1/2"	G	22,0	25,0	30,0	37,0	61,0	NICKEL PL.BRASS	ONK		
								25,0	28,0				36,0	43,0	STAINLESS STEEL	XK
								28,0	31,0							
								31,0	34,0							
PAPD PAPD-R	61	(63) ISO-M63 (6) 2"	M	2"NPT	N	2"	G	34,0	37,0	42,0	48,0	71,0	NICKEL PL.BRASS	ONK		
								37,0	40,0				47,0	53,0	STAINLESS STEEL	XK
								40,0	43,0							
								43,0	46,0							
PAPD PAPD-R	71	(75) ISO-M75 (7) 2 1/2"	M	2 1/2"NPT	N	2 1/2"	G	40,0	43,0	52,0	58,0	84,0	NICKEL PL.BRASS	ONK		
								43,0	46,0				58,0	64,0	STAINLESS STEEL	XK
								46,0	49,0							
								49,0	52,0							
PAPD PAPD-R	81	(90) ISO-M90 (8) 3"	M	3"NPT	N	3"	G	52,0	55,0	65,0	72,0	101,0	NICKEL PL.BRASS	ONK		
								56,0	59,0				71,0	78,0	STAINLESS STEEL	XK
								57,0	60,0							
								60,0	63,0							
								63,0	66,0							
PAPD PAPD-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	58,0	66,0	81,0	88,0	126,0	NICKEL PL.BRASS	ONK		
								66,0	72,0				88,0	96,0	STAINLESS STEEL	XK
								66,0	72,0							
								72,0	78,0							
								78,0	84,0							
								84,0	90,0							

CABLE GLAND ORDERING EXAMPLES

PAPD	11	20	-	M	ONK	= PAPD1120MONK (NON-BARRIER CABLE GLAND NICKEL PLATED BRASS ISO-M20 THR.)
PAPD	21	-	2	N	XK	= PAPD212NXK (NON-BARRIER CABLE GLAND STAINLESS STEEL)

LEGEND

(1)	CABLE GLAND TYPE/MODEL	PAPD = NON-BARRIER CABLE GLAND - PAPD-R = BARRIER CABLE GLAND
(2)	THREADING	M = ISO METRIC pitch 1,5mm - N = NPT (ANSI/ASME B1.20.1) - G = ISO-228
(3)	CABLE GLAND MATERIAL	ONK = NICKEL PLATED MARINE BRASS - XK = STAINLESS STEEL AISI-316L

PAPD DIMENSIONAL

1	BODY
2-3-4	INNER SEALING RING FOR ARMOURED CABLE
5	ARMOUR CLAMPING CONE
6	ARMOUR CLAMPING RING FOR ARMOURED CABLE
7	GLAND BARREL
8-9	OUTER SEALING RING
10	ANTI RUBBING WASHER
11	GLAND NUT
12	O-RING (ONLY FOR METRICAL)
13	*CHAMBER FOR SEALING ("R" VERSION ONLY)
14	LEAD WASHER

* Chamber will be filled with sealing when cable gland is completely assembled.

REMARK:

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.



Installation: hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)
Classification: Group II - Category 2G 2D



REFERENCE STANDARDS

Directive 2014/34/EU

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RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-31
EC Type-Examination Certificate	INERIS 03 ATEX 0140X
PROTECTION DEGREE	IP66 or IP66/68
AMBIENT TEMPERATURE	-40°C ÷ +90°C (Rubber rings EPDM-60) -60°C ÷ +180°C (Rubber rings SILICON)
OTHER AVAILABLE CERTIFICATES	IECEX: IECEX INE 11.0013X INMETRO: CEPEL 12.2176X EAC: TC RU C-IT.ГБ08.B.02646 (-75°C ÷ +180°C) RINA: ELE137217CS004 RUSSIAN MARINE CERTIFICATE (RMRS): 19.02549.280 Kc (Korean certification): 14-KB4BO- (from 0427X to 0044X) CCOE-PESO: P405708/7

Mechanical characteristics

Body / cap	OT-58 marine brass (ON) - AISI-316L stainless steel (IX) marine grade copper free aluminium (on project request only)
Finishes	full nickel plating treatment (brass material only)
Rubber rings	EPDM rubber 50-60 shore hardness (standard supply) Silicon rubber 60 shore hardness (on demand only)
O-ring	silicon rubber - 60 shore hardness
Skid washer	nylon 6.0
Chamber for sealing	OT-58 marine brass ("R" version only)

Applications

- For steel wire armoured cables (swa) for steel tape armoured cables and for lead inner sheath cables
- Double Compression Type For Indoor And Outdoor Use
- Provided armour clamping using clamping arrangements suitable for all armour wire/braid types
- Internal lead device for electrical bond of cable lead inner sheath
- Double compression - under armour and overall of armour cable (inner and outer sealing)
- Sealing with proper resin into "chamber of sealing" (on barrier type version "r" only)



On Request Accessories:

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing (See DL-NW-PTD-ET bulletin)

Cable gland selection table

CODE	SIZE	ENTRY THREAD SIZE			DIA. UNDER ARMOUR		OUTER SHEATH DIA.		HEXAGON [mm]	MATERIAL				
		METRIC (2)	NPT (2)	ISO 228 (2)	min [mm]	max [mm]	min [mm]	max [mm]		(3)				
PAP PAP-R	00	(16)ISO-M16 (0)3/8"	M	3/8"NPT	N	3/8"	G	4,0	7,0	10,0	15,0	24,0	NICKEL PL.BRASS	ON
								7,0	10,0				STAINLESS STEEL	IX
		(20)ISO-M20 (1)1/2"	M	1/2"NPT	N	1/2"	G	5,5	8,0	10,0	15,0	32,0	NICKEL PL.BRASS	ON
								8,0	10,5				STAINLESS STEEL	IX
PAP PAP-R	11	(20) ISO-M20 (1) 1/2"	M	1/2"NPT	N	1/2"	G	10,5	13,0	14,0	19,0	32,0	NICKEL PL.BRASS	ON
								5,5	8,0				STAINLESS STEEL	IX
PAP PAP-R	21	(25) ISO-M25 (2) 3/4"	M	3/4"NPT	N	3/4"	G	8,0	10,5	15,0	20,0	36,0	NICKEL PL.BRASS	ON
								10,5	13,0				STAINLESS STEEL	IX
PAP PAP-R	31	(32) ISO-M32 (3) 1"	M	1"NPT	N	1"	G	13,0	15,5	19,0	24,0	45,0	NICKEL PL.BRASS	ON
								15,5	18,0				STAINLESS STEEL	IX
PAP PAP-R	41	(40) ISO-M40 (4) 1 1/4"	M	1 1/4"NPT	N	1 1/4"	G	15,0	18,0	20,0	26,0	53,0	NICKEL PL.BRASS	ON
								18,0	21,0				STAINLESS STEEL	IX
PAP PAP-R	51	(50) ISO-M50 (5) 1 1/2"	M	1 1/2"NPT	N	1 1/2"	G	21,0	24,0	25,0	31,0	61,0	NICKEL PL.BRASS	ON
								24,0	27,0				STAINLESS STEEL	IX
PAP PAP-R	61	(63) ISO-M63 (6) 2"	M	2"NPT	N	2"	G	27,0	30,0	30,0	37,0	71,0	NICKEL PL.BRASS	ON
								30,0	33,0				STAINLESS STEEL	IX
PAP PAP-R	71	(75) ISO-M75 (7) 2 1/2"	M	2 1/2"NPT	N	2 1/2"	G	33,0	36,0	40,0	47,0	84,0	NICKEL PL.BRASS	ON
								36,0	39,0				STAINLESS STEEL	IX
PAP PAP-R	81	(90) ISO-M90 (8) 3"	M	3"NPT	N	3"	G	39,0	42,0	47,0	53,0	101,0	NICKEL PL.BRASS	ON
								42,0	45,0				STAINLESS STEEL	IX
PAP PAP-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	45,0	48,0	52,0	58,0	126,0	NICKEL PL.BRASS	ON
								48,0	51,0				STAINLESS STEEL	IX

CABLE GLAND ORDERING

EXAMPLES

PAP	11	20	-	M	ONK	= PAP1120MONK (NON-BARRIER CABLE GLAND NICKEL PLATED BRASS ISO-M20 THR.)
PAP	21	-	2	N	XK	= PAP212NXK (NON-BARRIER CABLE GLAND STAINLESS STEEL)

LEGEND

(1)	CABLE GLAND TYPE/MODEL	PAP# = NON-BARRIER CABLE GLAND - PAP-R# = BARRIER CABLE GLAND
(2)	THREADING	M = ISO METRIC pitch 1,5mm - N = NPT (ANSI/ASME B1.20.1) - G = ISO-228
(3)	CABLE GLAND MATERIAL	ON = NICKEL PLATED MARINE BRASS - IX = AISI-316L STAINLESS STEEL

PAP DIMENSIONAL

1	BODY
2-3-4	INNER SEALING RING FOR ARMOURED CABLE
5	ARMOUR CLAMPING CONE
6	ARMOUR CLAMPING RING FOR ARMOURED CABLE
7	GLAND BARREL
8-9	OUTER SEALING RING
10	ANTI RUBBING WASHER
11	GLAND NUT
12	O-RING (ONLY FOR METRICAL)
13	*CHAMBER FOR SEALING ("R" VERSION ONLY)

* Chamber will be filled with sealing when cable gland is completely assembled.

REMARK:

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.



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EC Type-Examination Certificate	INERIS OTEX 0140X
PROTECTION DEGREE	IP66 or IP66/68
AMBIENT TEMPERATURE	-40°C ÷ +90°C (Rubber rings EPDM-60) -60°C ÷ +180°C (Rubber rings SILICON)
OTHER AVAILABLE CERTIFICATES	IECEX: IECEX INE 11.0013X INMETRO: CEPEL 12.2176X EAC: TC RU C-IT.ГБ08.B.02646 (-75°C ÷ +180°C) RINA: ELE137217CS004 RUSSIAN MARINE CERTIFICATE (RMRS): 19.02549.280 Kc (Korean certification): 14-KB4BO- (from 0427X to 044X) CCOE-PESO: P405708/7

Mechanical characteristics

Body / cap	OT-58 marine brass (ON) - AISI-316L stainless steel (IX) marine grade copper free aluminium (on project request only)
Finishes	full nickel plating treatment (brass material only)
Rubber rings	EPDM rubber 50-60 shore hardness (standard supply) Silicon rubber 60 shore hardness (on demand only)
O-ring	silicon rubber - 60 shore hardness
Skid washer	nylon 6.0
Chamber for sealing	OT-58 marine brass ("R" version only)

Applications

For steel wire armoured cables (swa) for steel tape armoured cables
Single compression type for indoor and outdoor use
Provided armour clamping using clamping arrangements suitable for all armour wire/braid types
Single compression - under armour and overall of armour cable (inner and outer sealing)
Sealing with proper resin into "chamber of sealing" (on barrier type version "r" only)



On Request Accessories:

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing (See DL-NW-PTD-ET bulletin)

Cable gland selection table

CODE	SIZE	ENTRY THREAD SIZE				DIA. UNDER ARMOUR		OUTER SHEATH DIA.	HEXAGON \varnothing	MATERIAL			
		METRIC	NPT	ISO 228	min [mm]	max [mm]	max [mm]			[mm]	(3)		
PA PA-R	00	(16) ISO-M16 (0) 3/8"	M	3/8"NPT	N	3/8"	G	4,0	7,0	10,0	24,0	NICKEL PL. BRASS	ON
								7,0	10,0			STAINLESS STEEL	IX
		(20) ISO-M20 (1) 1/2"	M	1/2"NPT	N	1/2"	G	5,5	8,0	10,0	32,0	NICKEL PL. BRASS	ON
								8,0	10,5			STAINLESS STEEL	IX
PA PA-R	11	(20) ISO-M20 (1) 1/2"	M	1/2"NPT	N	1/2"	G	10,5	13,0	13,0	32,0	NICKEL PL. BRASS	ON
								15,5	18,0			STAINLESS STEEL	IX
PA PA-R	21	(25) ISO-M25 (2) 3/4"	M	3/4"NPT	N	3/4"	G	10,5	13,0	18,0	36,0	NICKEL PL. BRASS	ON
								15,5	18,0			STAINLESS STEEL	IX
PA PA-R	31	(32) ISO-M32 (3) 1"	M	1"NPT	N	1"	G	15,0	18,0	24,0	45,0	NICKEL PL. BRASS	ON
								18,0	21,0			STAINLESS STEEL	IX
PA PA-R	41	(40) ISO-M40 (4) 1 1/4"	M	1 1/4"NPT	N	1 1/4"	G	21,0	24,0	30,0	53,0	NICKEL PL. BRASS	ON
								24,0	27,0			STAINLESS STEEL	IX
PA PA-R	51	(50) ISO-M50 (5) 1 1/2"	M	1 1/2"NPT	N	1 1/2"	G	27,0	30,0	36,0	61,0	NICKEL PL. BRASS	ON
								30,0	33,0			STAINLESS STEEL	IX
PA PA-R	61	(63) ISO-M63 (6) 2"	M	2"NPT	N	2"	G	33,0	36,0	45,0	71,0	NICKEL PL. BRASS	ON
								36,0	39,0			STAINLESS STEEL	IX
PA PA-R	71	(75) ISO-M75 (7) 2 1/2"	M	2 1/2"NPT	N	2 1/2"	G	42,0	45,0	54,0	84,0	NICKEL PL. BRASS	ON
								45,0	48,0			STAINLESS STEEL	IX
PA PA-R	81	(90) ISO-M90 (8) 3"	M	3"NPT	N	3"	G	48,0	51,0	68,0	101,0	NICKEL PL. BRASS	ON
								51,0	54,0			STAINLESS STEEL	IX
PA PA-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	52,0	56,0	92,0	126,0	NICKEL PL. BRASS	ON
								56,0	59,0			STAINLESS STEEL	IX
PA PA-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	59,0	62,0	92,0	126,0	NICKEL PL. BRASS	ON
								62,0	65,0			STAINLESS STEEL	IX
PA PA-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	65,0	68,0	92,0	126,0	NICKEL PL. BRASS	ON
								68,0	74,0			STAINLESS STEEL	IX
PA PA-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	74,0	80,0	92,0	126,0	NICKEL PL. BRASS	ON
								80,0	86,0			STAINLESS STEEL	IX
PA PA-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	86,0	92,0	92,0	126,0	NICKEL PL. BRASS	ON
								86,0	92,0			STAINLESS STEEL	IX

CABLE GLAND ORDERING EXAMPLES

PAP	11	20	-	M	ONK	= PA1120MONK (NON-BARRIER CABLE GLAND NICKEL PLATED BRASS ISO-M20 THR.)
PAP	21	-	2	N	XK	= PA212NXK (NON-BARRIER CABLE GLAND STAINLESS STEEL)

LEGEND

(1)	CABLE GLAND TYPE/MODEL	PA = NON-BARRIER CABLE GLAND - PA-R = BARRIER CABLE GLAND
(2)	THREADING	M = ISO METRIC pitch 1,5mm - N = NPT (ANSI/ASME B1.20.1) - G = ISO-228
(3)	CABLE GLAND MATERIAL	ON = NICKEL PLATED MARINE BRASS - IX = AISI-316L STAINLESS STEEL

PA DIMENSIONAL

1	BODY
2-3-4	INNER SEALING RING FOR ARMOURED CABLE
5	ARMOUR CLAMPING CONE
6	ARMOUR CLAMPING RING FOR ARMOURED CABLE
7	ANTI RUBBING WASHER
8	GLAND NUT
9	O-RING (ONLY FOR METRICAL)
10	*CHAMBER FOR SEALING ("R" VERSION ONLY)

* Chamber will be filled with sealing when cable gland is completely assembled.

REMARK:

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OTHER AVAILABLE CERTIFICATES	IECEX: IECEX INE 11.0013X INMETRO: CEPEL 12.2174X EAC: TC RU C-IT.ГБ08.B.02646 (-75°C ÷ +180°C) RINA: ELE137217CS004 RUSSIAN MARINE CERTIFICATE (RMRS): 19.02549.280 Kc (Korean certification): 14-KB4BO- (from 0427X to 0044X) CCOE-PESO: P405708/7

Mechanical characteristics

Body / cap	OT-58 marine brass (ON) - AISI-316L stainless steel (IX) marine grade copper free aluminium (on project request only)
Finishes	full nickel plating treatment (brass material only)
Rubber rings	EPDM rubber 50-60 shore hardness (standard supply) Silicon rubber 60 shore hardness (on demand only)
O-ring	silicon rubber - 60 shore hardness
Skid washer	nylon 6.0
Chamber for sealing	OT-58 marine brass ("R" version only)

Applications

For unarmoured cables only
Single compression type suitable for indoor and outdoor use
Single compression - on cable (inner sealing)
Sealing with proper resin into "chamber of sealing" (on barrier type version "R" only)



On Request Accessories:

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing
(See DL-NW-PTD-ET bulletin)

Cable gland selection table

CODE (1)	SIZE	ENTRY THREAD SIZE			INNER SHEATH DIA.		HEXAGON ϕ [mm]	MATERIAL				
		METRIC (2)	NPT (2)	ISO 228 (2)	min [mm]	max [mm]		(3)	(3)			
PNA PNA-R	00	(16)ISO-M16 (0)3/8"	M	3/8"NPT	N	3/8"	G	4,0	7,0	24,0	NICKEL PL. BRASS	ON
								7,0	10,0		STAINLESS STEEL	IX
		(20)ISO-M20 (1)1/2"	M	1/2"NPT	N	1/2"	G	5,5	8,0	32,0	NICKEL PL. BRASS	ON
								8,0	10,5		STAINLESS STEEL	IX
PNA PNA-R	11	(20) ISO-M20 (1) 1/2"	M	1/2"NPT	N	1/2"	G	5,5	8,0	32,0	NICKEL PL. BRASS	ON
								8,0	10,5		STAINLESS STEEL	IX
								10,5	13,0			
PNA PNA-R	21	(25) ISO-M25 (2) 3/4"	M	3/4"NPT	N	3/4"	G	10,5	13,0	36,0	NICKEL PL. BRASS	ON
								13,0	15,5		STAINLESS STEEL	IX
								15,5	18,0			
PNA PNA-R	31	(32) ISO-M32 (3) 1"	M	1"NPT	N	1"	G	15,0	18,0	45,0	NICKEL PL. BRASS	ON
								18,0	21,0		STAINLESS STEEL	IX
								21,0	24,0			
PNA PNA-R	41	(40) ISO-M40 (4) 1 1/4"	M	1 1/4"NPT	N	1 1/4"	G	21,0	24,0	53,0	NICKEL PL. BRASS	ON
								24,0	27,0		STAINLESS STEEL	IX
								27,0	30,0			
PNA PNA-R	51	(50) ISO-M50 (5) 1 1/2"	M	1 1/2"NPT	N	1 1/2"	G	24,0	27,0	61,0	NICKEL PL. BRASS	ON
								27,0	30,0		STAINLESS STEEL	IX
								30,0	33,0			
								33,0	36,0			
PNA PNA-R	61	(63) ISO-M63 (6) 2"	M	2"NPT	N	2"	G	36,0	39,0	71,0	NICKEL PL. BRASS	ON
								39,0	42,0		STAINLESS STEEL	IX
								42,0	45,0			
PNA PNA-R	71	(75) ISO-M75 (7) 2 1/2"	M	2 1/2"NPT	N	2 1/2"	G	42,0	45,0	84,0	NICKEL PL. BRASS	ON
								45,0	48,0		STAINLESS STEEL	IX
								48,0	51,0			
								51,0	54,0			
PNA PNA-R	81	(90) ISO-M90 (8) 3"	M	3"NPT	N	3"	G	52,0	56,0	101,0	NICKEL PL. BRASS	ON
								56,0	59,0		STAINLESS STEEL	IX
								59,0	62,0			
								62,0	65,0			
								65,0	68,0			
PNA PNA-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	68,0	74,0	126,0	NICKEL PL. BRASS	ON
								74,0	80,0		STAINLESS STEEL	IX
								80,0	86,0			
								86,0	92,0			

CABLE GLAND ORDERING EXAMPLES

PNA	11	20	-	M	ONK	= PNA1120MONK (NON-BARRIER CABLE GLAND NICKEL PLATED BRASS ISO-M20 THR.)
PNA	21	-	2	N	XK	= PNA212NXK (NON-BARRIER CABLE GLAND STAINLESS STEEL)

LEGEND

(1)	CABLE GLAND TYPE/MODEL	PNA = NON-BARRIER CABLE GLAND - PNA-R = BARRIER CABLE GLAND
(2)	THREADING	M = ISO METRIC pitch 1,5mm - N = NPT (ANSI/ASME B1.20.1) - G = ISO-228
(3)	CABLE GLAND MATERIAL	ON = NICKEL PLATED MARINE BRASS - IX = AISI-316L STAINLESS STEEL

PNA DIMENSIONAL

1	BODY
2-3-4	INNER SEALING RING FOR NOT ARMOURD CABLE
5	PRESS RING
6	GLAND NUT
7	O-RING (ONLY FOR METRICAL)
8	*CHAMBER FOR SEALING ("R" VERSION ONLY)

* Chamber will be filled with sealing when cable gland is completely assembled.

REMARK:

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.



Installation: hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)
Classification: Group II - Category 2G 2D



REFERENCE STANDARDS

Directive 2014/34/EU

EXECUTION	<ul style="list-style-type: none"> ⊗ II 2 G Ex d / Exe / Exia IIC Gb ⊗ II 2 D Ex tb IIIC Db
RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-31
EC Type-Examination Certificate	INERIS 03 ATEX 0140X
PROTECTION DEGREE	IP66 or IP66/68
AMBIENT TEMPERATURE	-40°C ÷ +90°C (Rubber rings EPDM-60) -60°C ÷ +180°C (Rubber rings SILICON)
OTHER AVAILABLE CERTIFICATES	IECEx: IECEx INE 11.0013X INMETRO: CEPEL 12.2174X EAC: TC RU C-IT.ГБ08.B.02646 (-75°C ÷ +180°C) RINA: ELE137217CS004 RUSSIAN MARINE CERTIFICATE (RMRS): 19.02549.280 Kc (Korean certification): 14-KB4BO-(from 0427X to 0444X) CCOE-PESO: P405708/7

Mechanical characteristics

Body / cap	OT-58 marine brass (ON) - AISI-316L stainless steel (IX) marine grade copper free aluminium (on project request only)
Finishes	full nickel plating treatment (brass material only)
Rubber rings	EPDM rubber 50-60 shore hardness (standard supply) Silicon rubber 60 shore hardness (on demand only)
O-ring	silicon rubber - 60 shore hardness
Skid washer	nylon 6.0
Chamber for sealing	OT-58 marine brass ("R" version only)

Applications

For unarmoured cables only
Suitable for flexible conduit coupling connection by threaded cap (uni iso 228)
Single compression type suitable for indoor and outdoor use
Single compression - on cable (inner sealing)
Sealing with proper resin into "chamber of sealing" (on barrier type version "R" only)



On Request Accessories:

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing (See DL-NW-PTD-ET bulletin)

Cable gland selection table

CODE (1)	SIZE	ENTRY THREAD SIZE			INNER SHEATH DIA.		FEMALE THREAD UNI ISO 228 (4)	HEXAGON ϕ [mm]	MATERIAL		
		METRIC (2)	NPT (2)	ISO 228 (2)	min [mm]	max [mm]			(3)	(3)	
PNAF PNAF-R	00	(16)ISO-M16 (0)3/8"	M	3/8"NPT	N	3/8"	G	3/8"	24,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
		(20)ISO-M20 (1)1/2"	M	1/2"NPT	N	1/2"	G	1/2"	32,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
PNAF PNAF-R	11	(20) ISO-M20 (1) 1/2"	M	1/2"NPT	N	1/2"	G	1/2"	32,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	21	(25) ISO-M25 (2) 3/4"	M	3/4"NPT	N	3/4"	G	3/4"	36,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	31	(32) ISO-M32 (3) 1"	M	1"NPT	N	1"	G	1"	45,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	41	(40) ISO-M40 (4) 1 1/4"	M	1 1/4"NPT	N	1 1/4"	G	1 1/4"	53,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	51	(50) ISO-M50 (5) 1 1/2"	M	1 1/2"NPT	N	1 1/2"	G	1 1/2"	61,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	61	(63) ISO-M63 (6) 2"	M	2"NPT	N	2"	G	2"	71,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	71	(75) ISO-M75 (7) 2 1/2"	M	2 1/2"NPT	N	2 1/2"	G	2 1/2"	84,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	81	(90) ISO-M90 (8) 3"	M	3"NPT	N	3"	G	3"	101,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
PNAF PNAF-R	91	(100) ISO-M100 (9) 4"	M	4"NPT	N	4"	G	4"	126,0	NICKEL PL.BRASS	ON
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX
										STAINLESS STEEL	IX

CABLE GLAND ORDERING

EXAMPLES

PNAF	11	20	-	M	ONK	= PNAF1120MONK (NON-BARRIER CABLE GLAND NICKEL PLATED BRASS ISO-M20 THR.)
PNAF	21	-	2	N	XK	= PNAF212NXK (NON-BARRIER CABLE GLAND STAINLESS STEEL)

LEGENDA

(1)	CABLE GLAND TYPE/MODEL	PNAF = NON-BARRIER CABLE GLAND - PNAF-R = BARRIER CABLE GLAND
(2)	THREADING	M = ISO METRIC pitch 1,5mm - N = NPT (ANSI/ASME B1.20.1) - G = ISO-228
(3)	CABLE GLAND MATERIAL	ONK = NICKEL PLATED MARINE BRASS - XK = AISI-316L STAINLESS STEEL
(4)	FEMALE THREAD	ISO-228 FEMALE THREAD SUITABLE FOR FLEXIBLE CONDUIT COUPLING

PNAF DIMENSIONAL

1	BODY
2-3-4	INNER SEALING RING FOR NOT ARMOURED CABLE
5	PRESS RING
6	GLAND NUT "FEMALE"
7	O-RING (ONLY FOR METRICAL)
8	*CHAMBER FOR SEALING ("R" VERSION ONLY)

* Chamber will be filled with sealing when cable gland is completely assembled.



Installation: hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)
Classification: Group II - Category 2G 2D



Mechanical characteristics

LOCKNUTS

Material	nickel plated brass
Finishes	full nickel plating treatment (brass material only)

SHORUDS

Material	EPDM
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GASKETS

Material	nylon 6.0
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EARTH TAGS

Material	stainless steel (for stainless cable glands)
	nickel plated brass (for nickel plated brass cable glands)

Applications

Locknuts	Are preferred items used in securing cable glands to the gland plate especially to plastic junction boxes
Shoruds	For all type of glands application where additional protection is required
Epoxy compound kit	Is provided for submission of barrier cable glands type P.-R Kit composed of: - Component A (dark grey) - Component B (white) - Nitrile gloves
Gaskets	Are used to maintain the ip rating across the interface between the equipment and relevant cable gland
Earth tags	Are used to ensure earth continuity and grounding of cable armour

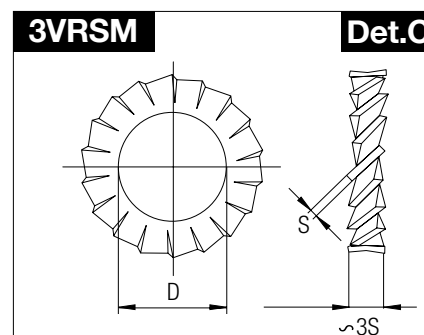
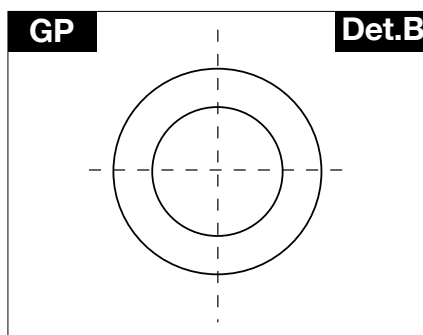
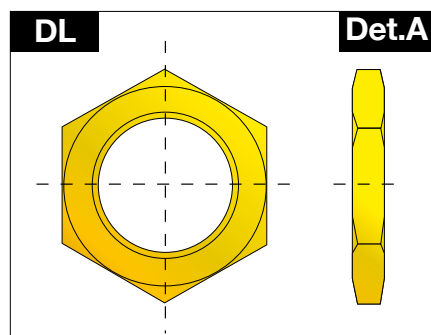


Technical Features

LOCKNUTS			
DETAIL A	THREADS / SIZE		
TYPE	NPT	UNI-228	ISO
DL0	3/8"	3/8"	M16
DL1	1/2"	1/2"	M20
DL2	3/4"	3/4"	M25
DL3	1"	1"	M32
DL4	1-1/4"	1-1/4"	M40
DL5	1-1/2"	1-1/2"	M50
DL6	2"	2"	M63
DL7	2-1/2"	2-1/2"	M75
DL8	3"	3"	M90
DL9	4"	4"	M100

GASKETS			
DETAIL B	THREADS / SIZE		
TYPE	NPT	UNI-228	ISO
GP0	3/8"	3/8"	M16
GP1	1/2"	1/2"	M20
GP2	3/4"	3/4"	M25
GP3	1"	1"	M32
GP4	1-1/4"	1-1/4"	M40
GP5	1-1/2"	1-1/2"	M50
GP6	2"	2"	M63
GP7	2-1/2"	2-1/2"	M75
GP8	3"	3"	M90
GP9	4"	4"	M100

WASHERS		
TYPE	ØD [mm]	DETAIL
3VRSM20X	20	C
3VRSM25X	25	C
3VRSM32X	32	C
3VRSM40X	40	C
3VRSM50X	50	C
3VRSM63X	63	C

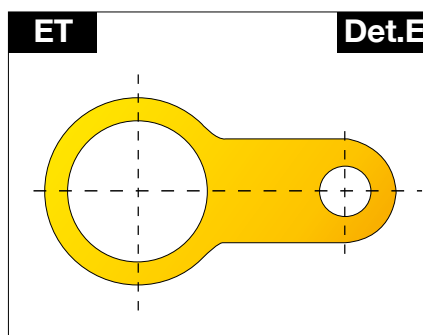
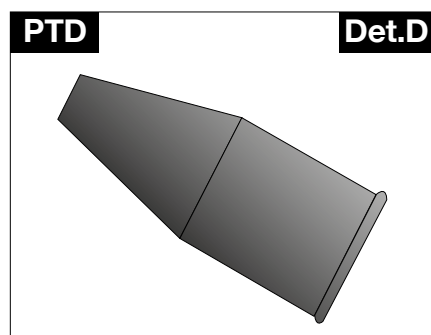


SHROUDS*			
DETAIL D	THREADS / SIZE		
TYPE	NPT	UNI-228	ISO
PTD0	3/8"	3/8"	M16
PTD1	1/2"	1/2"	M20
PTD2	3/4"	3/4"	M25
PTD3	1"	1"	M32
PTD4	1-1/4"	1-1/4"	M40
PTD5	1-1/2"	1-1/2"	M50
PTD6	2"	2"	M63
PTD7	2-1/2"	2-1/2"	M75
PTD8	3"	3"	M90
PTD9	4"	4"	M100

EARTHS TAGS			
DETAIL E	THREADS / SIZEE		
TYPE	NPT	UNI-228	ISO
ET0	3/8"	3/8"	M16
ET1	1/2"	1/2"	M20
ET2	3/4"	3/4"	M25
ET3	1"	1"	M32
ET4	1-1/4"	1-1/4"	M40
ET5	1-1/2"	1-1/2"	M50
ET6	2"	2"	M63
ET7	2-1/2"	2-1/2"	M75
ET8	3"	3"	M90
ET9	4"	4"	M100

TWO-COMPONENT EPOXY PASTE	
SIZE / CODE	Q.TY COMPOUND [gr]
0 / INN-FS0904-1	6
1 / INN-FS0904-1	6
2 / INN-FS0904-2	12
3 / INN-FS0904-3	24
4 / INN-FS0904-5	56
5 / INN-FS0904-5	56
6 / INN-FS0904-6	88
7 / INN-FS0904-7	200
8 / INN-FS0904-8	288

* Blue colour on request.



REMARK:

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