

PMA Smart Line IP66

General technical details

Modern, versatile and attractive. Functional and modern design at an excellent value for money. Suitable for machine building, installation and construction industries.

One-piece design, IP66 protection and simple, fast installation are the outstanding features of the Smart Line. Other characteristics including a modern, functional design and an excellent price/performance ratio make this product line a very attractive solution.

Material

- Fittings made from specially formulated polyamide 6
- Self-extinguishing
- Free from halogens, REACH + RoHS compliant
- Temperature range:
–45°C to +105°C, short-term to +150°C

Characteristics

- High impact resistance
- Good conduit pull-out strength
- Vibration-proof connection to PMA conduit
- Fits conduit profiles – fine (T) and coarse (G)
- To avoid accidental opening, disassembling only possible with a screwdriver





PMA Smart Line

General technical details



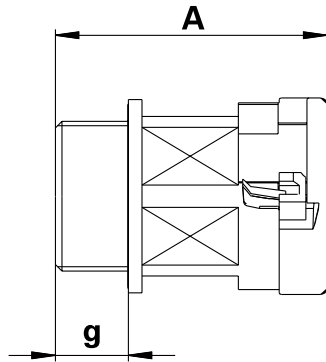
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Patent

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IP66

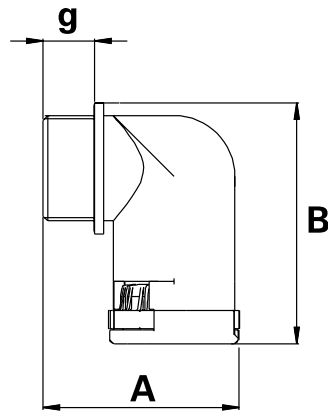
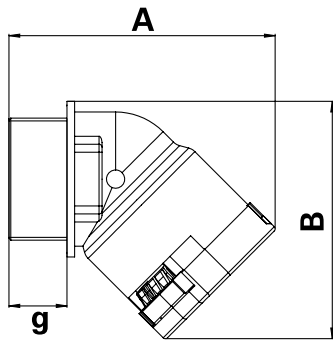
IP66 static

IP54 dynamic

- One piece fitting
- Conical sealing method
- Integrated sealing lip in thread flange
- Easy "push-in" installation
- Ready for installation (fitting gets delivered with engaged locking elements)



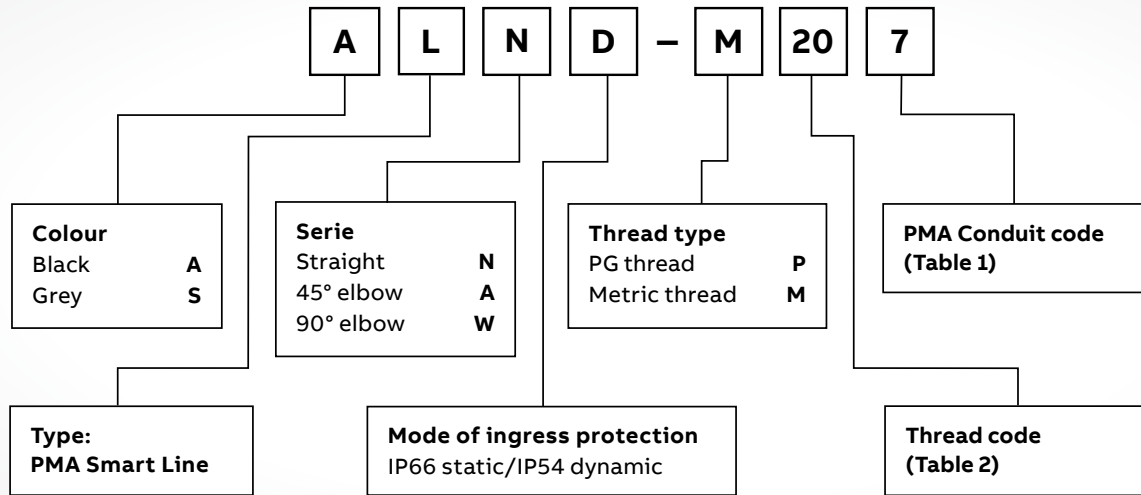
g = Thread length A = Overall length



g = Thread length A x B = External dimensions

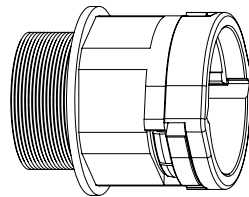
PMA Smart Line

Part number codes

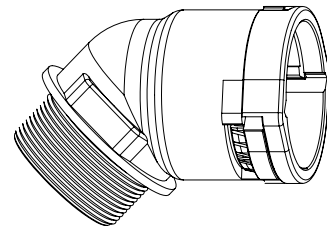


Connector series

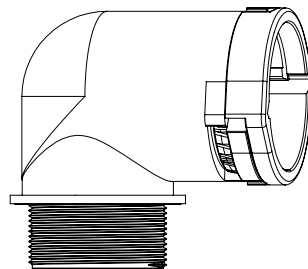
- 01 Straight (N)
- 02 45° elbow (A)
- 03 90° elbow (W)



— 01



— 02



— 03

PMA Smart Line

Size codes, installation

Table 1: Conduit codes

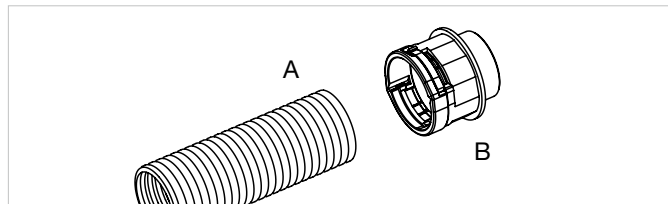
| Nominal width | Metric size | PMA code |
|---------------|-------------|----------|
| 07 | 10 | M |
| 10 | 12 | 0 |
| 12 | 16 | 2 |
| 17 | 20 | 7 |
| 23 | 25 | 3 |
| 29 | 32 | 9 |
| 36 | 40 | 6 |
| 48 | 50 | 8 |

Table 2: Thread codes

| Thread Metric | PMA code |
|---------------|----------|
| M12 x 1.5 | M12 |
| M16 x 1.5 | M16 |
| M20 x 1.5 | M20 |
| M25 x 1.5 | M25 |
| M32 x 1.5 | M32 |
| M40 x 1.5 | M40 |
| M50 x 1.5 | M50 |
| M63 x 1.5 | M63 |

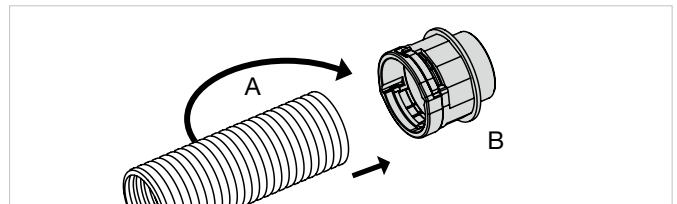
| Thread PG | PMA code |
|-----------|----------|
| PG07 | P07 |
| PG09 | P09 |
| PG11 | P11 |
| PG13.5 | P13 |
| PG16 | P16 |
| PG21 | P21 |
| PG29 | P29 |
| PG36 | P36 |
| PG48 | P48 |

Installation IP66



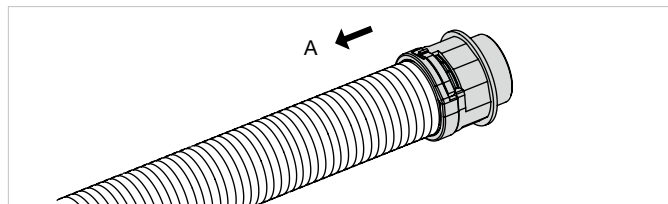
01

A = Conduit
B = Fitting



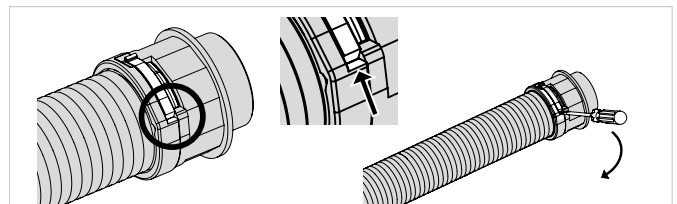
02

Push in the conduit (A) with a slight twist until the stop.



03

Pull back the conduit (A) slightly to ensure the locking mechanism is fully engaged.




04

To disengage the locking mechanism use a size 1 screwdriver.


Connectors, metric, polyamide thread

Type LND & LAD

Type LND - Connector straight, metric thread

| | Order no. black, IP66 | Order no. grey, IP66 | Thread metric | Fits to conduit size | | Thread length (mm) | Overall length (mm) |
|--|--------------------------|-------------------------|------------------|----------------------|--------|--------------------------|---------------------------|
| | | | | NW | Metric | | |
| LND, patent  | ALND-M120 | SLND-M120 | M12 x 1.5 | 10 | 12 | 11.0 | 34.0 |
| | ALND-M160 | SLND-M160 | M16 x 1.5 | 10 | 12 | 11.0 | 34.0 |
| | ALND-M162 | SLND-M162 | M16 x 1.5 | 12 | 16 | 11.0 | 38.0 |
| | ALND-M200 | SLND-M200 | M20 x 1.5 | 10 | 12 | 11.0 | 34.0 |
| | ALND-M202 | SLND-M202 | M20 x 1.5 | 12 | 16 | 11.0 | 38.0 |
| | ALND-M207 | SLND-M207 | M20 x 1.5 | 17 | 20 | 11.0 | 41.0 |
| | ALND-M257 | SLND-M257 | M25 x 1.5 | 17 | 20 | 12.0 | 42.0 |
| | ALND-M253 | SLND-M253 | M25 x 1.5 | 23 | 25 | 12.0 | 45.5 |
| | ALND-M323 | SLND-M323 | M32 x 1.5 | 23 | 25 | 15.0 | 48.5 |
| | ALND-M329 | SLND-M329 | M32 x 1.5 | 29 | 32 | 15.0 | 50.5 |
| | ALND-M409 | SLND-M409 | M40 x 1.5 | 29 | 32 | 19.0 | 54.5 |
| | ALND-M406 | SLND-M406 | M40 x 1.5 | 36 | 40 | 19.0 | 60.5 |
| | ALND-M506 | SLND-M506 | M50 x 1.5 | 36 | 40 | 19.0 | 61.0 |
| | ALND-M508 | SLND-M508 | M50 x 1.5 | 48 | 50 | 19.0 | 61.0 |
| | ALND-M638 | SLND-M638 | M63 x 1.5 | 48 | 50 | 19.0 | 61.0 |


Type LAD - Connector 45° elbow, metric thread

| | Order no. black, IP66 | Order no. grey, IP66 | Thread metric | Fits to conduit size | | Thread length (mm) | External Dimensions (mm) |
|--|--------------------------|-------------------------|------------------|----------------------|--------|--------------------------|--------------------------------|
| | | | | NW | Metric | | |
| LAD, patent  | ALAD-M120 | SLAD-M120 | M12 x 1.5 | 10 | 12 | 11.0 | 42.5 x 33.0 |
| | ALAD-M160 | SLAD-M160 | M16 x 1.5 | 10 | 12 | 11.0 | 42.5 x 35.0 |
| | ALAD-M162 | SLAD-M162 | M16 x 1.5 | 12 | 16 | 11.0 | 47.5 x 39.5 |
| | ALAD-M202 | SLAD-M202 | M20 x 1.5 | 12 | 16 | 11.0 | 47.5 x 41.5 |
| | ALAD-M207 | SLAD-M207 | M20 x 1.5 | 17 | 20 | 11.0 | 54.0 x 46.0 |
| | ALAD-M257 | SLAD-M257 | M25 x 1.5 | 17 | 20 | 12.0 | 55.0 x 48.5 |
| | ALAD-M253 | SLAD-M253 | M25 x 1.5 | 23 | 25 | 12.0 | 63.5 x 55.5 |
| | ALAD-M323 | SLAD-M323 | M32 x 1.5 | 23 | 25 | 15.0 | 67.0 x 60.0 |
| | ALAD-M329 | SLAD-M329 | M32 x 1.5 | 29 | 32 | 15.0 | 72.5 x 63.5 |
| | ALAD-M409 | SLAD-M409 | M40 x 1.5 | 29 | 32 | 19.0 | 76.5 x 66.5 |
| | ALAD-M406 | SLAD-M406 | M40 x 1.5 | 36 | 40 | 19.0 | 87.5 x 78.0 |
| | ALAD-M506 | SLAD-M506 | M50 x 1.5 | 36 | 40 | 19.0 | 88.0 x 82.0 |
| | ALAD-M508 | SLAD-M508 | M50 x 1.5 | 48 | 50 | 19.0 | 97.5 x 88.0 |
| | ALAD-M638 | SLAD-M638 | M63 x 1.5 | 48 | 50 | 19.0 | 97.5 x 94.5 |


Connectors, metric and PG, polyamide thread

Type LWD & LND

Type LWD - Connector 90° elbow, metric thread

| | Order no. black, IP66 | Order no. grey, IP66 | Thread metric | Fits to conduit size | | Thread length (mm) | External dimensions (mm) |
|--|--------------------------|-------------------------|------------------|----------------------|--------|--------------------------|--------------------------------|
| | | | | NW | Metric | | |
| LWD, patent  | ALWD-M120 | SLWD-M120 | M12 x 1.5 | 10 | 12 | 11.0 | 33.0 x 36.5 |
| | ALWD-M160 | SLWD-M160 | M16 x 1.5 | 10 | 12 | 11.0 | 33.0 x 38.5 |
| | ALWD-M162 | SLWD-M162 | M16 x 1.5 | 12 | 16 | 11.0 | 37.5 x 43.0 |
| | ALWD-M202 | SLWD-M202 | M20 x 1.5 | 12 | 16 | 11.0 | 37.5 x 45.0 |
| | ALWD-M207 | SLWD-M207 | M20 x 1.5 | 17 | 20 | 11.0 | 42.0 x 50.5 |
| | ALWD-M257 | SLWD-M257 | M25 x 1.5 | 17 | 20 | 12.0 | 43.0 x 53.0 |
| | ALWD-M253 | SLWD-M253 | M25 x 1.5 | 23 | 25 | 12.0 | 52.5 x 59.0 |
| | ALWD-M323 | SLWD-M323 | M32 x 1.5 | 23 | 25 | 15.0 | 56.0 x 62.5 |
| | ALWD-M329 | SLWD-M329 | M32 x 1.5 | 29 | 32 | 15.0 | 62.5 x 69.0 |
| | ALWD-M409 | SLWD-M409 | M40 x 1.5 | 29 | 32 | 19.0 | 66.5 x 72.0 |
| | ALWD-M406 | SLWD-M406 | M40 x 1.5 | 36 | 40 | 19.0 | 76.0 x 83.0 |
| | ALWD-M506 | SLWD-M506 | M50 x 1.5 | 36 | 40 | 19.0 | 76.0 x 87.0 |
| | ALWD-M508 | SLWD-M508 | M50 x 1.5 | 48 | 50 | 19.0 | 89.0 x 92.5 |
| | ALWD-M638 | SLWD-M638 | M63 x 1.5 | 48 | 50 | 19.0 | 89.0 x 99.0 |

Type LND - Connector straight, PG thread


| | Order no. black, IP66 | Order no. grey, IP66 | Thread PG | Fits to conduit size | | Thread length (mm) | Overall length (mm) |
|--|--------------------------|-------------------------|--------------|----------------------|--------|--------------------------|---------------------------|
| | | | | NW | Metric | | |
| LND, patent  | ALND-P070* | SLND-P070* | 07 | 10 | 12 | 7.0 | 44.0 |
| | ALND-P090 | SLND-P090 | 09 | 10 | 12 | 11.0 | 34.0 |
| | ALND-P092* | SLND-P092* | 09 | 12 | 16 | 8.0 | 50.0 |
| | ALND-P110 | SLND-P110 | 11 | 10 | 12 | 8.0 | 45.5 |
| | ALND-P112 | SLND-P112 | 11 | 12 | 16 | 11.0 | 38.0 |
| | ALND-P132 | SLND-P132 | 13.5 | 12 | 16 | 11.0 | 38.0 |
| | ALND-P137 | SLND-P137 | 13.5 | 17 | 20 | 11.0 | 41.0 |
| | ALND-P167 | SLND-P167 | 16 | 17 | 20 | 11.0 | 41.0 |
| | ALND-P213 | SLND-P213 | 21 | 23 | 25 | 12.0 | 45.5 |
| | ALND-P299 | SLND-P299 | 29 | 29 | 32 | 12.0 | 47.5 |
| | ALND-P366 | SLND-P366 | 36 | 36 | 40 | 13.0 | 54.5 |
| | ALND-P488 | SLND-P488 | 48 | 48 | 50 | 13.0 | 55.0 |

*These products will be delivered with a thread adapter


Connectors, PG, polyamide thread

Type LAD & LWD conduit

Type LAD - Connector 45° elbow, PG thread

| | Order no. black, IP66 | Order no. grey, IP66 | Thread PG | Fits to conduit size | | Thread length (mm) | External dimensions (mm) |
|--|--------------------------|-------------------------|--------------|----------------------|--------|--------------------------|--------------------------------|
| | | | | NW | Metric | | |
| LAD, patent  | ALAD-P090 | SLAD-P090 | 09 | 10 | 12 | 11.0 | 42.5 x 34.0 |
| | ALAD-P112 | SLAD-P112 | 11 | 12 | 16 | 11.0 | 47.5 x 40.0 |
| | ALAD-P132 | SLAD-P132 | 13.5 | 12 | 16 | 11.0 | 47.5 x 41.5 |
| | ALAD-P137 | SLAD-P137 | 13.5 | 17 | 20 | 11.0 | 54.0 x 46.0 |
| | ALAD-P167 | SLAD-P167 | 16 | 17 | 20 | 11.0 | 54.0 x 47.0 |
| | ALAD-P213 | SLAD-P213 | 21 | 23 | 25 | 12.0 | 63.5 x 57.5 |
| | ALAD-P299 | SLAD-P299 | 29 | 29 | 32 | 12.0 | 69.5 x 65.0 |
| | ALAD-P366 | SLAD-P366 | 36 | 36 | 40 | 13.0 | 81.5 x 80.0 |
| | ALAD-P488 | SLAD-P488 | 48 | 48 | 50 | 13.0 | 91.5 x 93.0 |

Type LWD - Connector 90° elbow, PG thread

| | Order no. black, IP66 | Order no. grey, IP66 | Thread PG | Fits to conduit size | | Thread length (mm) | External dimensions (mm) |
|--|--------------------------|-------------------------|--------------|----------------------|--------|--------------------------|--------------------------------|
| | | | | NW | Metric | | |
| LWD, patent  | ALWD-P070* | SLWD-P070* | 07 | 10 | 12 | 7.0 | 42.0 x 37.5 |
| | ALWD-P090 | SLWD-P090 | 09 | 10 | 12 | 11.0 | 32.5 x 37.5 |
| | ALWD-P092* | SLWD-P092* | 09 | 12 | 16 | 8.0 | 48.0 x 43.5 |
| | ALWD-P110* | SLWD-P110* | 11 | 10 | 12 | 8.0 | 44.0 x 40.0 |
| | ALWD-P112 | SLWD-P112 | 11 | 12 | 16 | 11.0 | 36.5 x 43.5 |
| | ALWD-P130* | SLWD-P130* | 13.5 | 10 | 12 | 9.0 | 37.5 x 40.0 |
| | ALWD-P132 | SLWD-P132 | 13.5 | 12 | 16 | 11.0 | 36.5 x 45.0 |
| | ALWD-P137 | SLWD-P137 | 13.5 | 17 | 20 | 11.0 | 41.0 x 50.5 |
| | ALWD-P167 | SLWD-P167 | 16 | 17 | 20 | 11.0 | 41.0 x 51.5 |
| | ALWD-P213 | SLWD-P213 | 21 | 23 | 25 | 12.0 | 52.0 x 61.0 |
| | ALWD-P299 | SLWD-P299 | 29 | 29 | 32 | 12.0 | 58.5 x 70.5 |
| | ALWD-P366 | SLWD-P366 | 36 | 36 | 40 | 13.0 | 70.0 x 85.0 |
| | ALWD-P488 | SLWD-P488 | 48 | 48 | 50 | 13.0 | 83.0 x 97.5 |

*These products will be delivered with a thread adapter