



PRODUCT TYPE RA**90

Metallic 90 Degree Rotating Adaptors and Reducers

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Zone 1 : AEx db : AEx eb : AEx ta



PRODUCT DESCRIPTION

"RA**90" Series Dual Certified Right Angled Rotating Adaptors are designed to protect cables when installed in confined spaces where the cable may otherwise be subject to excessive bending and / or stress whilst maintaining Ex db, Ex eb, Ex ta and Ex nR methods of explosion protection. Approved for use in mining (except Aluminium) and surface installations, they maintain IP66 & IP68 for IEC type applications. They are Class I Zone 1 approved for NEC and CEC type applications whilst also maintain Type 4X/6P rating. The series is available with Male/Male, Male/Female or Female/Female connection threads.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), ANSI/UL 514B, ANSI/UL 60079-0/1/7, ANSI/ISA 60079-31, UL50E

EXAMPLE PART NUMBERING:
RAMF900BF/NP/M20/M20

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|--------------|--|
| RA | Rotating Thread converting Adaptor/Reducer |
| MF90 | Male / Female (MF90) - Male / Male (MM90) - Female/Female (FF90) |
| O | No IP O-ring |
| B | Brass (B) - Stainless Steel (S) |
| F | Multiple Certification |
| K-V-H | Locknut & Nylon (K) - Fibre (V) - PTFE (H) IP Washer |
| S | Including Serrated Washer |
| 1 | Quantity per kit |
| NP | Nickel Plated |
| M20 | Male Entry Thread |
| M20 | Female Entry Thread |

OPTIONAL ACCESSORIES:

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|------------------------|--|
| IP Washers | (N) Nylon (ACNSW) - (J) Fibre (ACFSW) - (Z) PTFE (ACPSW) |
| Earth Tag | (T) Brass (ACBET) - St-Steel (ACSET) |
| Locknut | (L) Brass (ACBLN) - St-Steel (ACSLN) |
| Serrated Washer | (S) Stainless Steel (ACSSW) |

| | |
|-------------------------------|---|
| IP RATING: | IP66, IP68 (2 metres for 24 hours) & Type 4X/6P |
| OPERATING TEMPERATURE: | Washer - None -60°C to +135°C Washer - Fibre -40°C to +95°C Washer - Nylon -40°C to +135°C Washer - PTFE -60°C to +135°C |
| MATERIALS: | Brass or Stainless Steel |
| PLATING: | Electroless Nickel |

CERTIFICATION:

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|---------------------|---|
| UKEX | I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc |
| ATEX | I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc |
| IECEX | Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da |
| CEC - Canada | Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da Type 4X / 6P |
| NEC - USA | Class I Zone 1 AEx db IIC Gb / Ex eb IIC Gb Zone 20 AEx ta IIIC Da Type 4X / 6P |
| CCC - China | Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20 |
| CCoE - India | Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc |
| ABS | Specified ABS Rules |
| LLOYD'S | Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da |

CERTIFICATION No:

| | |
|---------------------|-----------------------------------|
| UKEX | CML 21UKEX1026X & CML 21UKEX4027X |
| ATEX | CML 19ATEX1330X & CML 19ATEX4331X |
| IECEX | IECEX CML 19.0101X |
| CEC - Canada | CSA 2310046 |
| NEC - USA | CSA 2310046 |
| CCC - China | 2021312313000376 |
| CCoE - India | PESO P494321/5 & P494321/14 |
| ABS | 20-LD1944057-PDA |
| LLOYD'S | LR2124442TA |

Male and Female Thread References and Size information can be found on page 77 of our product catalogue. Adaptor and Reducer size information is available on request sales@peppers.co.uk.

Male and female threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- Only products with Metric and NPT threads are marked with CSA approval.
- Where approval in addition to UKEX, ATEX, IECEX and CSA is required, this must be clearly requested at time of enquiry / order.

- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.