



**PRECISION SUBSEA AS  
PRODUCT DATASHEET**

**PRECISION MOIST MATE (MM) CONNECTOR,  
BULKHEAD & IN-LINE**



**KEY FEATURES**

- Hybrid Connector – 5 off Power(60A), 25 off Signal(10A), 5 optical channels optional
- All contacts rated for 1kV
- Moist Mate (MM) connector for harsh environment
- Max water depth 3,000m
- Design life: 25 years
- Double electrical isolation barrier system
- Contact area oil filled and pressure compensated
- Front loaded insert
- Non corrosive-plastic material

**PART NUMBERS**

PART NUMBER	DESCRIPTION
100020027	Precision MM Connector Flying Lead Pin
100020194	Precision MM Connector Bulkhead Pin
100020195	Precision MM Connector Bulkhead Socket
100020197	Precision MM Connector Test/In-Line Socket

**CONTACT NUMBERING & CONFIGURATION**

Contact Allocation Guide Line	Possible Ethernet Groups	Normal Signal Earth / Screens (where applicable)
Power Pins: 1 - 5	6 - 9	10
Signal Pins: 6 - 30	11 - 14	15
Optical: 31 - 35	16 - 19	20
	21 - 24	25
	26 - 29	30



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### TECHNICAL DATA

#### ELECTRICAL SPECIFICATION

- No. of contacts and working current:
  - Power contacts is for 16mm<sup>2</sup> and rated for 60A DC      5 Off
  - Signal contacts is for AWG 16 and rated for 10A DC      25 Off
- Wire termination prep. for boot seals:
  - All contacts rated for Uo/Umax      1kV/1kV
- Maximum test voltage:
  - Phase to ground      4kV
  - Phase to phase      8kV
- Minimum insulation resistance at 1,000V      >10 Gohms
- Maximum contacts resistance      <10 milliohms
- Maximum in-rush current:
  - Power contacts      600A in 1/2 sec.
  - Signal contacts      100A in 1/2 sec.
- MTBF      24.480.300 hours
- Solder cup max size:
  - Power contacts      16mm<sup>2</sup>
  - Signal contacts      1.5mm<sup>2</sup>
- Ethernet      100BASE-TX

#### MECHANICAL SPECIFICATION

- Working Depth      3,000m
- No. of matings (contacts shall be lubricated)      >200
- Design life      25 years
- Operating temperature on land      -20°C to +50°C
- Oil filling      Wacker AK 350 (Silicone Oil)
- Installation:
  - Torque by hand      Typical T.B.D. Nm
  - Contacts lubricated with Wacker AK 350      Typical each 10th. Make-up
- Torque, Bulkhead fasteners (M6x25)      2-5 Nm

NOTE: Test Connectors shall not be equipped with poppet valves or blind plugs.

#### TEST REPORTS

- Qualification Test Report      RPT-10084

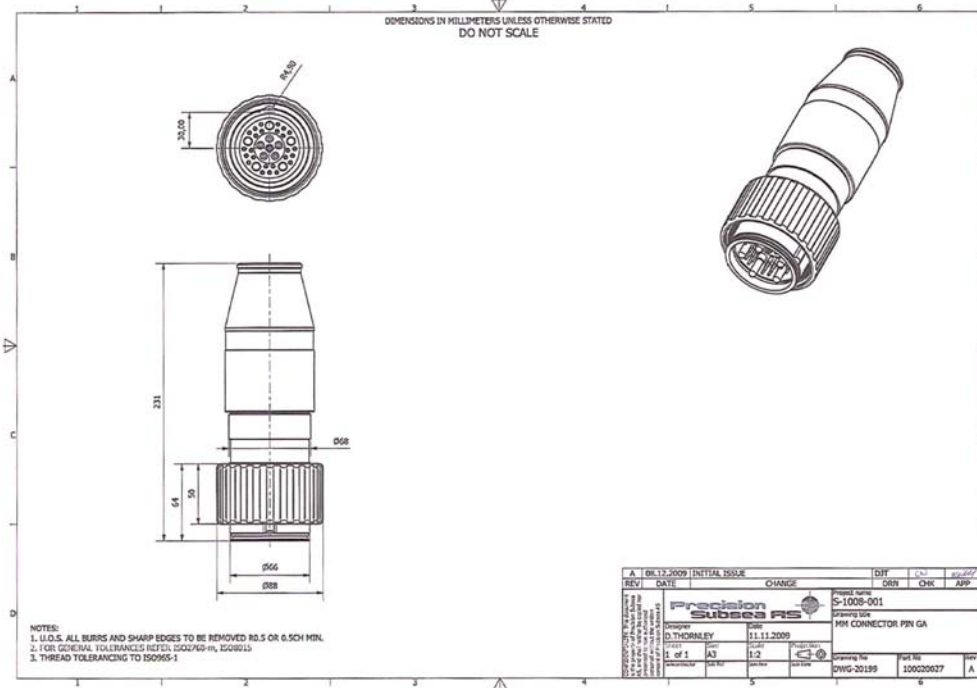
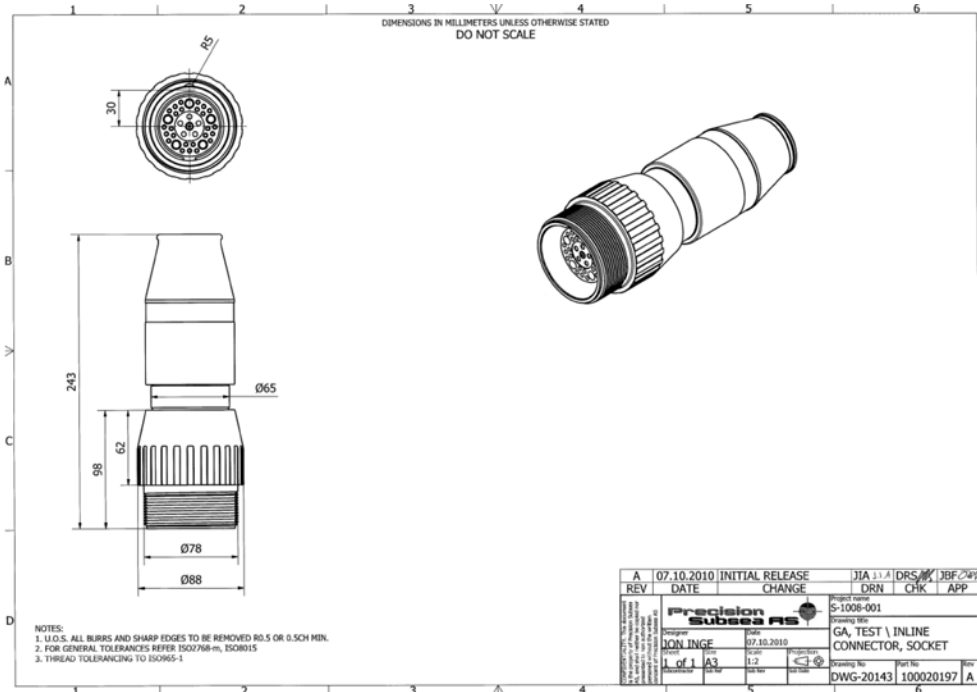
#### DRAWING AND PROCEDURE REFERENCES

- Assembly Procedure      ASY-10005
- Transport and Handling Instructions      THI-10014
- Installation Tools      Normal hand tools
- Installation and Commissioning Procedure      ICP-10015



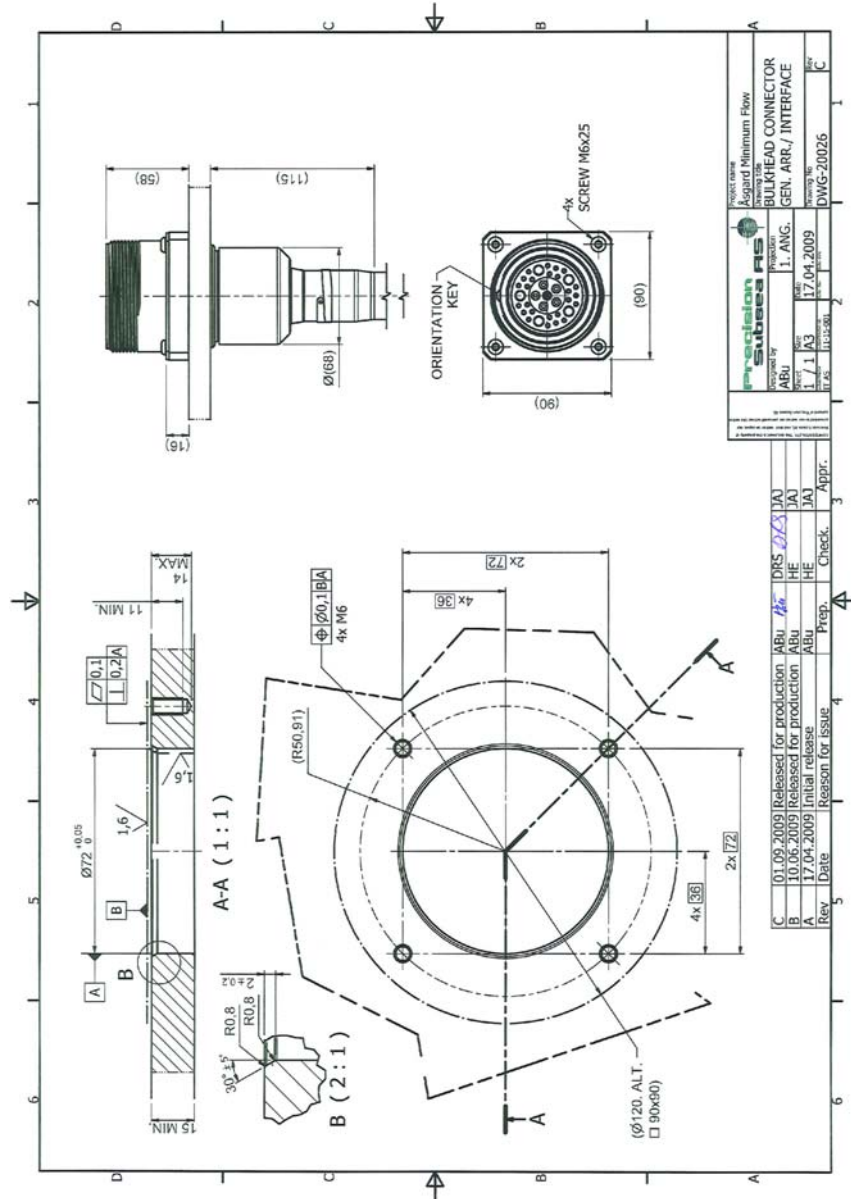
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### GA / INTERFACE DRAWING FOR PRECISION MM CONNECTOR, TEST / IN-LINE



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### GA / INTERFACE DRAWING FOR PRECISION MM BULKHEAD CONNECTOR



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