



OCP CABLE PROTECTION LTD

# J2316-DESIGN SUMMARY-001

|                    |         |            |                                |
|--------------------|---------|------------|--------------------------------|
| Orcabend Run No. : | J2316#1 | Date :     | 19 <sup>th</sup> December 2003 |
| Enquiry No. :      | E2385   | Customer : | MBARI – Via CRP Group          |
| Job No. :          | J2316   | Project :  | Moos Mooring System            |

## Introduction

OCP have been requested to provide cable protection to work in conjunction with the CRP Linksyn system.

## Reference Documents

1. "CRP\_Design\_Specifics", Rev 1.0 - 5 Dec 2003, emailed from Andrew Hamilton – Dated 09/12/03.
2. "11550 MBARI Schedule.xls", emailed to Andrew Hamilton – Dated 03/12/03

## Properties of Flexible

|                     |            |                  |          |           |                  |               |
|---------------------|------------|------------------|----------|-----------|------------------|---------------|
| Outside Diameter    | 28         | mm               | with a   | N/A       | mm               | tolerance     |
| Minimum Bend Radius | 1,000      | mm               | (stored) | N/A       | mm               | (operational) |
| Stiffness           | 0.015 Est' | KNm <sup>2</sup> | (min.)   | 0.05 Est' | KNm <sup>2</sup> | (max.)        |

## Duty and Environmental Conditions

### Load Cases

| Tension (kN) | Angle °   | Tension (kN) | Angle ° |
|--------------|-----------|--------------|---------|
| 1000/θ       | See Chart |              |         |

Deployed in air / water (delete as applicable)  
Both air and water.

Temperature 0° °C (min)  
23° °C (max)

## Design Parameters

P.U. Code OCP 009

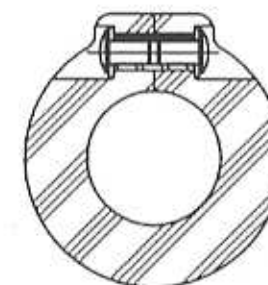
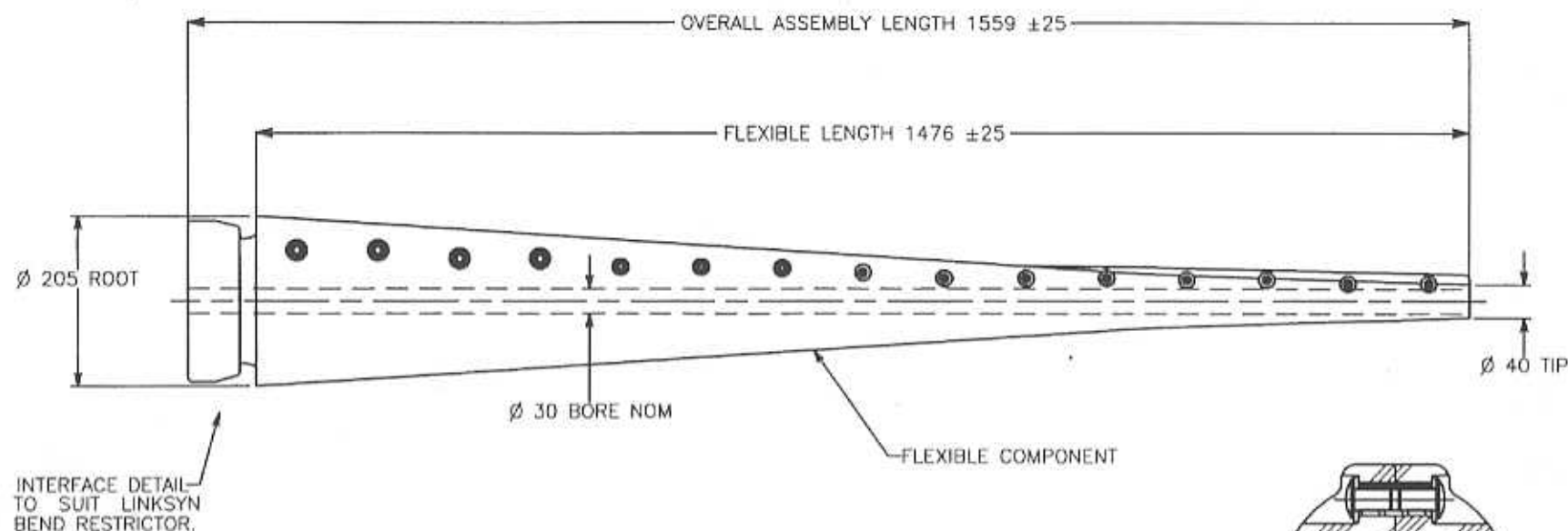
### Key Dimensions

|                   |      |    |        |
|-------------------|------|----|--------|
| — Root O/D        | 205  | mm | (max.) |
| — Flexible Length | 1476 | mm | (nom.) |
| — Tip O/D         | 40   | mm | (nom.) |
| — Bore            | 30   | mm | (nom.) |

### Bolt Details

|            |                             |
|------------|-----------------------------|
| — Size     | N/A                         |
| — Material | Stainless Steel A4-50 Min   |
| — Quantity | N/A                         |
| — P.C.D    | N/A Split Bend Stiffener mm |

DO NOT SCALE - IF IN DOUBT ASK



ENLARGED SECTION THROUGH TYPICAL FASTENER POSITION. HEADS RECESSED TO PROTECT ADJACENT TURNS OF CABLE WHEN SPOOLED.

# NOTES:

MATERIAL - FLEXIBLE COMPONENT : POLYETHER BASED POLYURETHANE, COLOUR ORANGE.

SPLIT LINE INSERT TUBES : STAINLESS STEEL, 316L.

FASTENERS : BUTTON HEAD CAP SCREWS, STAINLESS STEEL A4-50 MIN.

APPROX WEIGHT

IN AIR - 21 KGS  
IN WATER - 2 KGS

## OCP Cable Protection Ltd

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DOCUMENT No. 023003/1 AM ISSUE 3

REMOVE ALL BURRS BUT LEAVE CORNERS SHARP  
UNLESS OTHERWISE STATED

SURFACE FINISH - N7 UNLESS OTHERWISE STATED

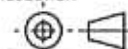
| N No.      | N5  | N6  | N7  | N8  | N9  |
|------------|-----|-----|-----|-----|-----|
| MICROINCH  | 16  | 32  | 63  | 125 | 250 |
| MICROMETER | 0.4 | 0.8 | 1.6 | 3.2 | 6.3 |

GENERAL TOLERANCES UNLESS OTHERWISE STATED

|      |             |
|------|-------------|
| X    | = ± 1.00 MM |
| X.X  | = ± 0.50 MM |
| X.XX | = ± 0.25 MM |
| X*   | = ± 0.5°    |
| X.X* | = ± 0.25°   |

SCALE  
1:8 AT A4 SIZE

PROJECTION



UNITS MM

| ISS         | DCN NO      | AUTHOR | DATE     |
|-------------|-------------|--------|----------|
|             |             |        | 17.12.03 |
| DRAWN       | ERT         |        | DATE     |
| CHECKED     | [Signature] |        | DATE     |
| RELEASED BY | [Signature] |        | DATE     |
|             |             |        | 17/12/03 |

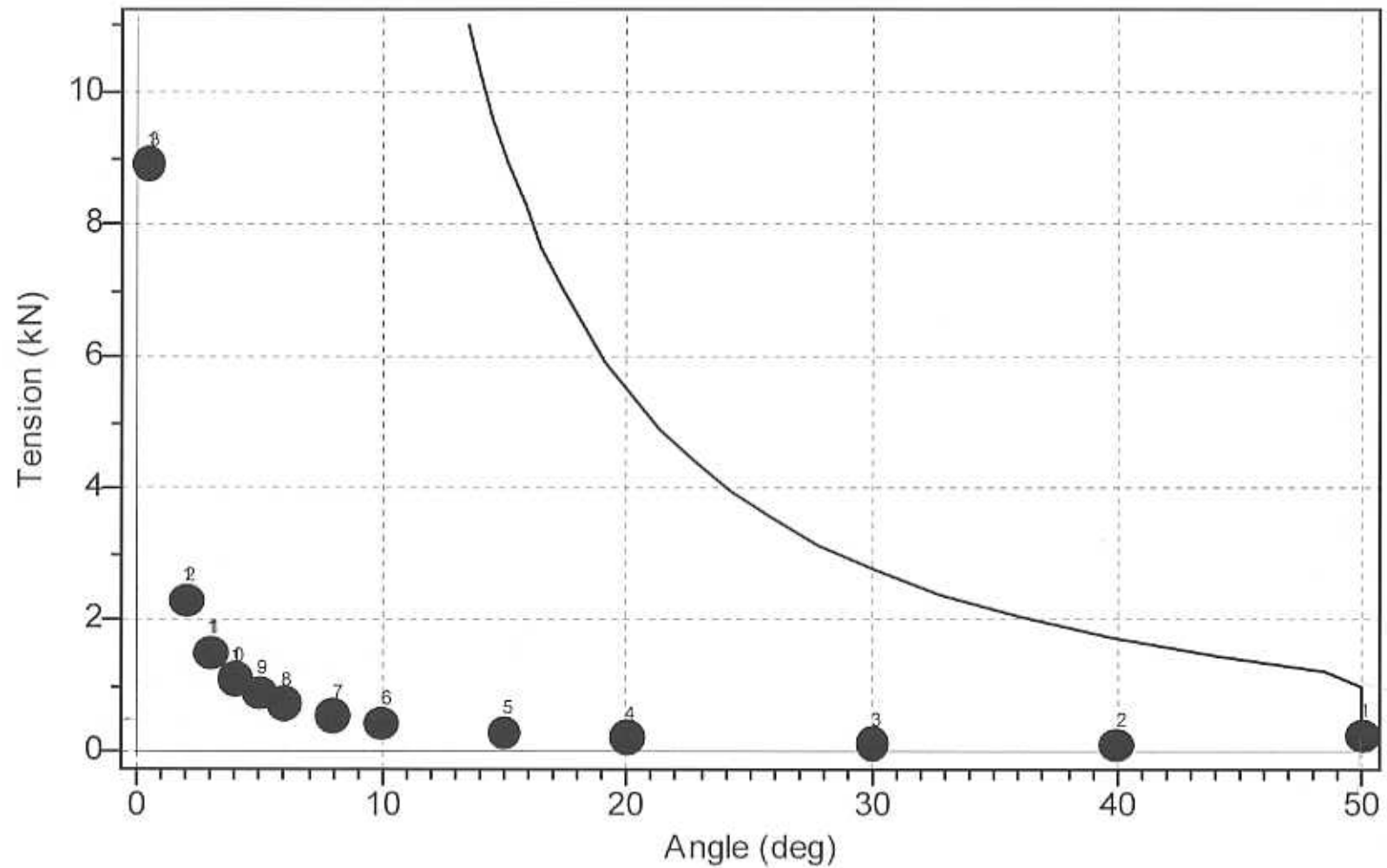
TITLE  
GENERAL ARRANGEMENT

- SPLIT BEND STIFFENER
- CAPTIVE MOUNT DESIGN
- Ø 28 NOM CABLE SIZE

| ORG NO | ISS | SHEET | 1 OF 1 |
|--------|-----|-------|--------|
| 5559   | A   |       |        |

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OrcaBend: J2316#1 ( Linksyn ).obd (modified 14:44 on 19/12/03)



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