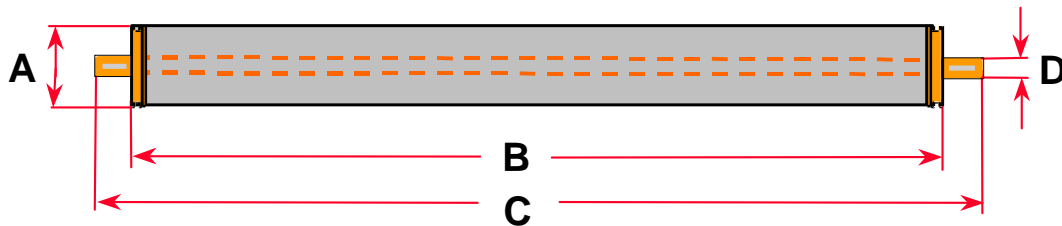


# SPIRA-CEL<sup>®</sup> Data Sheet

## - Modules for Ultrafiltration -

### WY-UP-2440 Series

Modules for Pilot Projects



| Module       | A                | B             | C                    | D                       | Membrane              |       |       |       |       |
|--------------|------------------|---------------|----------------------|-------------------------|-----------------------|-------|-------|-------|-------|
|              | Ø Outside Module | Length Module | Length Permeate tube | Ø Outside Permeate tube | Regular membrane type | UP005 | UP010 | UP020 | UP150 |
| Dimension mm | 62               | 965           | 1016                 | 19.05                   | Membrane material     | PES   | PES   | PES   | PES   |
| Tolerance mm | + 0 / - 2        | + 0 / - 3     | ± 0.5                | + 0.1 / - 0             | Nom. MWCO (kDa)       | 5     | 10    | 20    | 150   |

| Module specs & data            |  |                |                   |
|--------------------------------|--|----------------|-------------------|
| Spacer thickness, diamond type |  | mil / mm       | 44 / 1.1          |
| Membrane area                  |  | m <sup>2</sup> | 1.8               |
| Outer wrap                     |  |                | Industry standard |

| Recommended operating conditions |  |                   |      |
|----------------------------------|--|-------------------|------|
| Prefiltration                    |  | µm                | ≤ 75 |
| Cross flow <sup>(1)</sup>        |  | m <sup>3</sup> /h | 2    |
| Permeate pressure                |  | bar               | 0    |

| Allowable operating conditions                      |  |     |        |
|---|--|-----|--------|
| Feed pressure, max.                                 |  | bar | 10     |
| Retentate pressure, min.                            |  | bar | 0.7    |
| Transmembrane pressure, max.                        |  | bar | 10     |
| Permeate pressure, max.                             |  | bar | 0.35   |
| Pressure loss per module, max. (Δp <sub>max</sub> ) |  | bar | 2      |
| Processing temperature                              |  | °C  | 5 - 50 |
| pH range during filtration                          |  |     | 2 - 11 |
| pH range during CIP                                 |  |     | 2 - 11 |

<sup>(1)</sup> for water at 25 °C

**Note:**

Not all combinations are available. Please do not hesitate to contact MICRODYN-NADIR for any further information.

MICRODYN-NADIR behält sich das Recht vor, Angaben ohne vorherige Ankündigung anzupassen.  
We reserve the right to change specifications without prior notification.

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# SPIRA-CEL<sup>®</sup> Data Sheet

- Modules for Ultrafiltration -

## WY-UP-2440 Series

### Changes:

The here printed values may be subject to changes. Presently valid are the values on the data sheet shown on web site [www.microdyn-nadir.com](http://www.microdyn-nadir.com).

### Tolerances:

The tolerances indicated on our data sheets are composed to the best of our knowledge.

### Warranty:

Stated warranties are valid if values on this data sheet are followed during use of the module(s) only. Also rules for installation, cleaning, water and preservation have to be adhered to and log registered made available for MICRODYN-NADIR on request. MICRODYN-NADIR approved cleaning detergent, anti-foam, polymers, other chemicals and filter-aids lubricants can be applied only.

### First Cleaning:

MICRODYN-NADIR modules may be put into production after having gone through the first cleaning prescribed by MICRODYN-NADIR on product packing notes or given differently by MICRODYN-NADIR.

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