## **ISE** Manipulators

## Magnum Series Multi Function, Field Serviceable Subsea Manipulators

Strong and rugged Integrated telemetry Anodized aluminum construction Operating depth of 6,000 msw (Option to depth of 11,000 msw) Integrated tool clamp Proven reliability Large operating envelope Multiple gripper options



|                | 5 STD                                 | 5 Mini        | 6 Mini        | 7                                     |
|----------------|---------------------------------------|---------------|---------------|---------------------------------------|
| Functions      | 5                                     | 5             | 6             | 7                                     |
| Reach          | 46 inches                             | 28 inches     | 38 inches     | 60 inches                             |
| Weight         | 57 Kg                                 | 13 Kg         | 63 Kg         | 71 Kg                                 |
|                | (125 lbs)                             | (29 lbs)      | (139 lbs)     | (157 lbs)                             |
| Maximum Lift   | 454 Kg                                | 68 Kg         | 454 Kg        | 454 Kg                                |
|                | (1000 lbs)                            | (150 lbs)     | (1000 lbs)    | (1000 lbs)                            |
| Lift at        | 295 Kg                                | 23 Kg         | 317 Kg        | <b>295 Kg</b>                         |
| Full Extension | (650 lbs)                             | (51 lbs)      | (700 lbs)     | (650 lbs)                             |
| Wrist Torque   | <b>108 Nm</b>                         | 14 Nm         | 108 Nm        | 108 Nm                                |
|                | (80 ft-lbs)                           | (10 ft-lbs)   | (80 ft-lbs)   | (80 ft-lbs)                           |
| Grip Force     | 160 Kg                                | 35 Kg         | 160 Kg        | <b>205</b> Kg                         |
|                | (350 lbs)                             | (78 lbs)      | (350 lbs)     | (450 lbs)                             |
| Input Pressure | 6900 kPa                              | 3447 kPa      | 6900 kPa      | 6900 kPa                              |
|                | (1000 psi)                            | (500 psi)     | (1000 psi)    | (1000 psi)                            |
| Input Flow     | 19 LPM                                | <b>19 LPM</b> | <b>19 LPM</b> | <b>19 LPM</b>                         |
| (Recommended)  | (5 gpm)                               | (5 gpm)       | (5 gpm)       | (5 gpm)                               |
| Control        | Rate or<br>Spacially<br>Correspondent | Rate          | Rate          | Rate or<br>Spacially<br>Correspondent |

ISE has been designing and building subsea manipulators for over 35 years. Our current generation of Magnum manipulators offer extremely high lift capacity, even at full extension. Components and assembly have been refined to allow for rapid field serviceability, while maintaining a high degree of reliability.

Magnum Arms. Toughest in the business.



## International Submarine Engineering Ltd. All things underwater

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