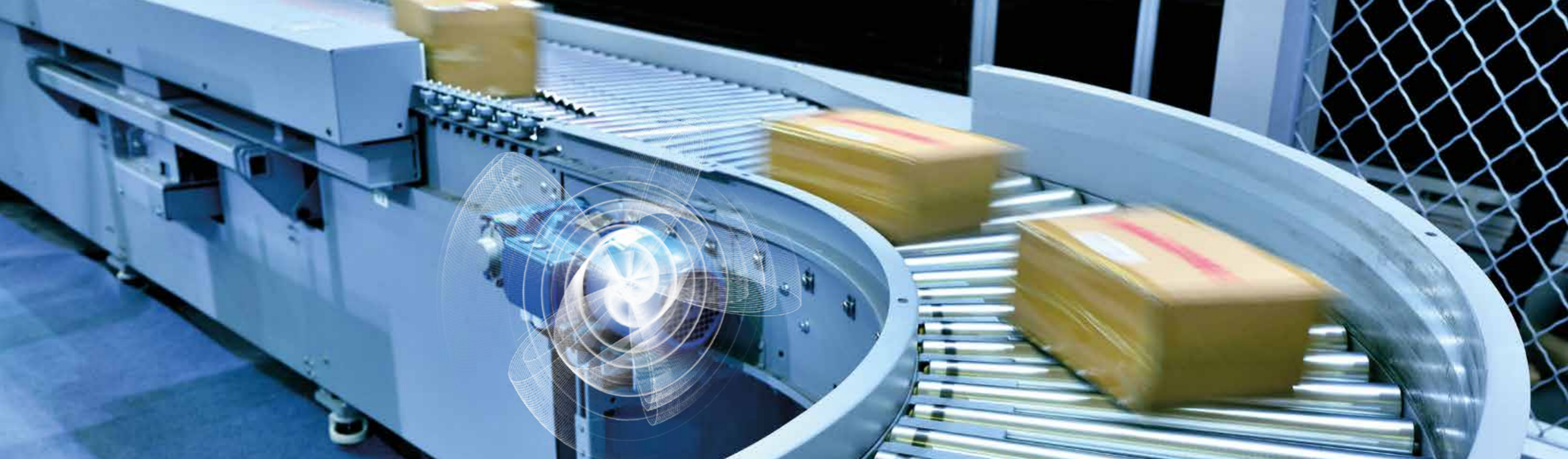


BEVEL BUDDYBOX®

BBB-H WITH IE5 MOTOR

HIGH PERFORMANCE PERMANENT MAGNET IE5 MOTOR



HIGHLY EFFICIENT. COMPACT. HIGH SPEED.

Are you looking for an energy-saving, compact, high speed drive solution for your application? The Bevel BuddyBox-H with a high performance Permanent magnet IE5 motor is the product you need!

The drive package ranges from 0,75–4kW and consists of Sumitomo Drive Technologies Bevel BuddyBox-H a top-rated right angle helical bevel gear unit with a IE5 permanent magnet synchronous magnet motor complete with a variable frequency drive.

What makes the Bevel BuddyBox-H special is its combination of a bevel input and a helical output that make this unit extremely efficient with the capacity for input speeds up to 3,600rpm. Aluminum construction provides high thermal capacity. Dependable hardened steel gearing inside a light weight, compact housing allows easy installation with less load on the head shaft.

The maintenance-free grease lubrication enables the unit to be mounted in any orientation without custom modifications. The greater efficiency of the

BBB-H is a perfect pair with our Ultra-Premium Efficiency IE5 motor.

With this perfect pairing, lower energy consumption for your application is now within reach.

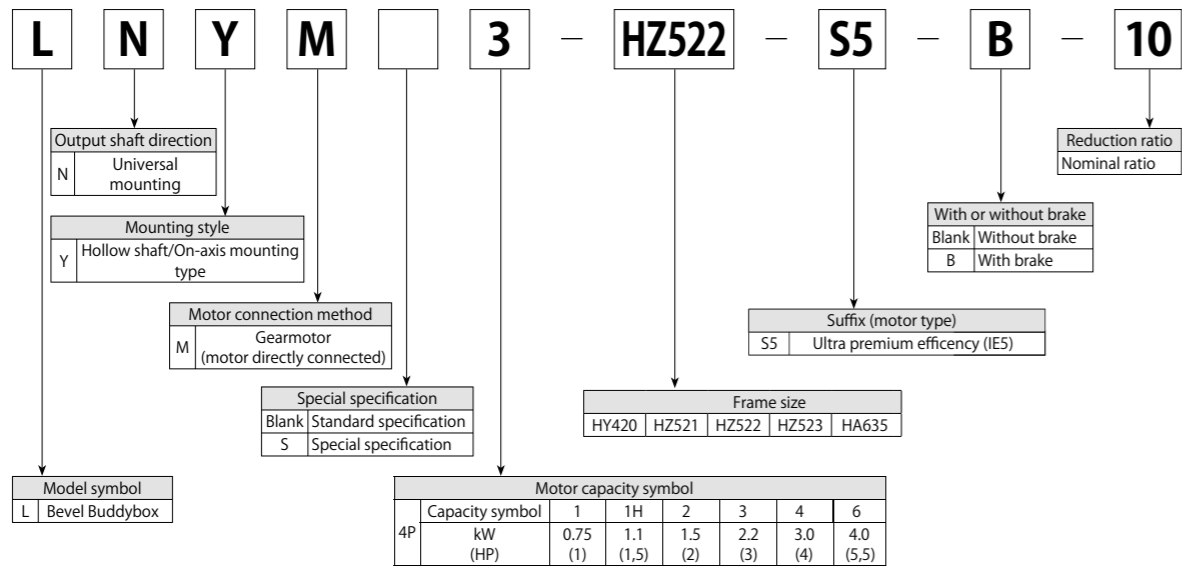
You will decrease your ecological footprint and enjoy reduced operating costs by going green with this drive package.

This package's power and speed make it perfect for airport baggage handling and general conveying applications. When we say our products are built to last—we mean it.

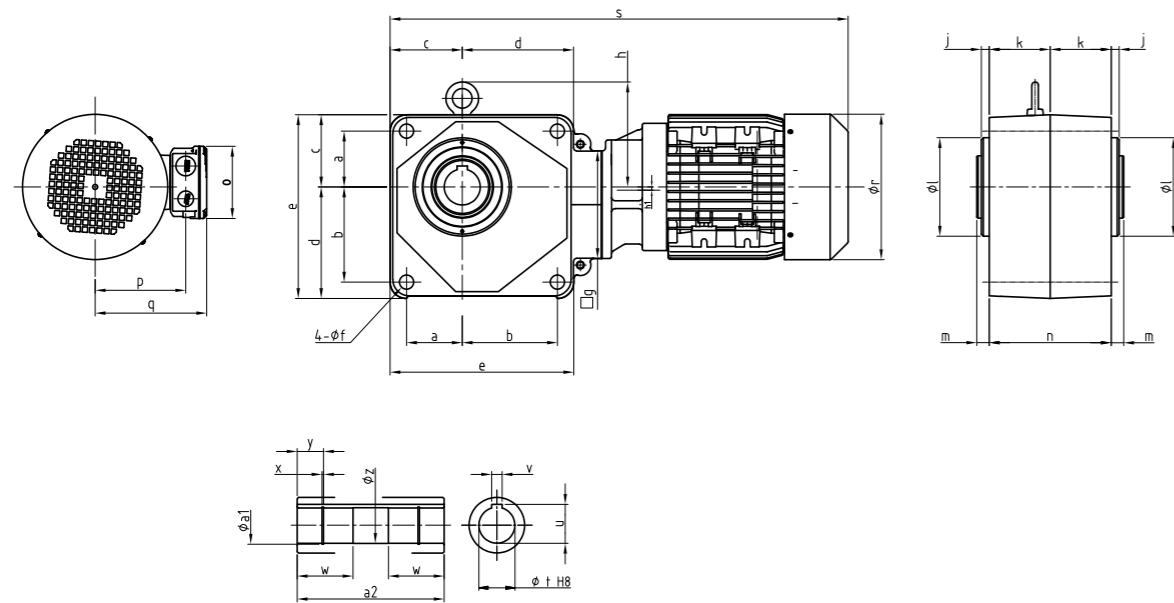
Visit the Bevel BuddyBox - product page here:



NOMENCLATURE



DIMENSION DRAWINGS

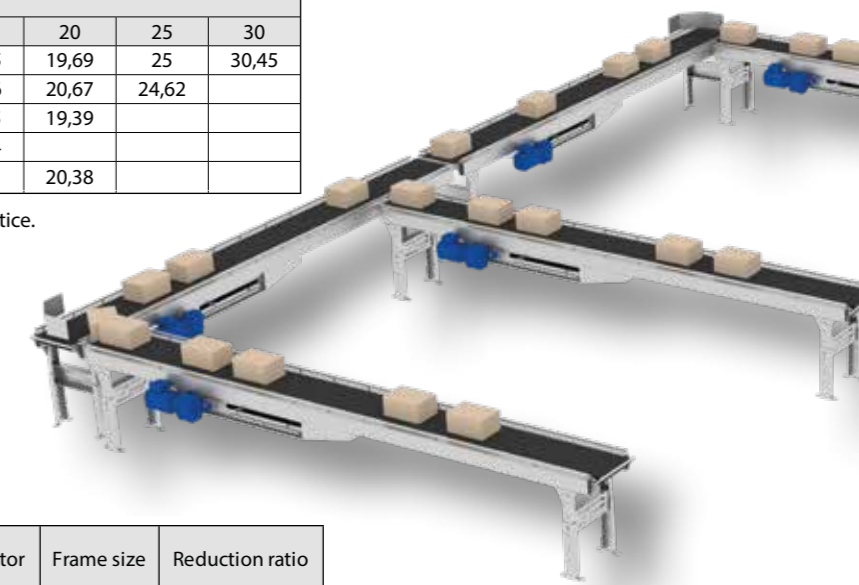


| Type | Frame | Motor | a | b | c | d | e | f | g | h | h1 | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a1 | a2 |
|--------|-------|--------|----|-----|-----|-----|-----|----|-----|-----|----|----|----|-----|----|-----|-----|-----|-----|-----|-----|----|------|----|----|------|----|------|------|-----|
| LNMY1 | HY420 | HPS71 | 57 | 75 | 70 | 88 | 158 | 14 | - | - | 3 | 5 | 59 | 95 | 10 | 118 | 93 | 90 | 114 | 136 | 461 | 35 | 38,3 | 10 | 52 | 1,75 | 26 | 35,6 | 37 | 138 |
| LNMY1H | HZ521 | HPS90 | 70 | 80 | 84 | 94 | 178 | 14 | 150 | - | 6 | 5 | 68 | 110 | 10 | 136 | 110 | 115 | 147 | 179 | 547 | 45 | 48,8 | 14 | 67 | 1,95 | 30 | 45,6 | 47,5 | 156 |
| LNMY2 | HZ521 | HPS90 | 70 | 80 | 84 | 94 | 178 | 14 | 150 | - | 6 | 5 | 68 | 110 | 10 | 136 | 110 | 115 | 147 | 179 | 554 | 45 | 48,8 | 14 | 67 | 1,95 | 30 | 45,6 | 47,5 | 156 |
| LNMY3 | HZ522 | HPS90 | 70 | 80 | 84 | 94 | 178 | 14 | 150 | - | 6 | 5 | 68 | 110 | 10 | 136 | 110 | 115 | 170 | 222 | 554 | 45 | 48,8 | 14 | 67 | 1,95 | 30 | 45,6 | 47,5 | 156 |
| LNMY4 | HZ522 | HPS90 | 70 | 80 | 84 | 94 | 178 | 14 | 150 | - | 6 | 5 | 68 | 110 | 10 | 136 | 110 | 115 | 170 | 222 | 554 | 45 | 48,8 | 14 | 67 | 1,95 | 30 | 45,6 | 47,5 | 156 |
| LNMY6 | HZ523 | HPS112 | 70 | 80 | 84 | 94 | 178 | 14 | 150 | - | 6 | 5 | 68 | 110 | 10 | 136 | 110 | 138 | 170 | 222 | 621 | 45 | 48,8 | 14 | 67 | 1,95 | 30 | 45,6 | 47,5 | 156 |
| LNMY6 | HA635 | HPS112 | 85 | 145 | 110 | 170 | 280 | 22 | 164 | 160 | 0 | 12 | 93 | 150 | 19 | 186 | 110 | 138 | 170 | 222 | 698 | 55 | 59,3 | 16 | 85 | 2,2 | 40 | 55,6 | 58 | 224 |

ACTUAL REDUCTION RATIO

| Frame size | Reduction ratio | | | | | | | |
|------------|-----------------|-------|-------|-------|-------|-------|-------|-------|
| | 5 | 7 | 10 | 12 | 15 | 20 | 25 | 30 |
| HY420 | 5 | 6,97 | 10 | 11,96 | 14,75 | 19,69 | 25 | 30,45 |
| HZ521 | 5 | 7,03 | 9,81 | 11,74 | 15,26 | 20,67 | 24,62 | |
| HZ522 | 5,059 | 7 | 10 | 12,21 | 15,25 | 19,39 | | |
| HZ523 | 5,143 | 7,043 | 9,833 | 12,20 | 14,54 | | | |
| HA635 | | | | | | 20,38 | | |

Note: The contents of this table may be changed without notice.



SELECTION TABLE

| kW | Output speed (1/min) | Output torque (Nm) | Service factor | Frame size | Reduction ratio |
|------|----------------------|--------------------|----------------|------------|-----------------|
| 0,75 | 360 | 18,9 | 2,00 | HY420 | 5 |
| | 258 | 26,3 | 2,00 | | 7 |
| | 180 | 37,8 | 2,00 | | 10 |
| | 151 | 45,2 | 2,00 | | 12 |
| | 122 | 55,8 | 2,00 | | 15 |
| | 91,4 | 74,4 | 2,00 | | 20 |
| | 72,0 | 94,5 | 2,00 | | 25 |
| 59,1 | 115 | 2,00 | 30 | | |
| 1,1 | 360 | 27,7 | 3,35 | HZ521 | 5 |
| | 256 | 39,0 | 3,35 | | 7 |
| | 183 | 54,4 | 3,35 | | 10 |
| | 153 | 65,1 | 3,35 | | 12 |
| | 118 | 84,6 | 3,35 | | 15 |
| | 87,1 | 115 | 3,35 | | 20 |
| 73,1 | 136 | 3,35 | 25 | | |
| 1,5 | 360 | 37,8 | 2,47 | HY521 | 5 |
| | 256 | 53,1 | 2,47 | | 7 |
| | 183 | 74,2 | 2,47 | | 10 |
| | 153 | 88,7 | 2,47 | | 12 |
| | 118 | 115 | 2,47 | | 15 |
| | 87,1 | 156 | 2,47 | | 20 |
| 73,1 | 186 | 2,47 | 25 | | |
| 2,2 | 356 | 56,1 | 3,00 | HZ522 | 5 |
| | 257 | 77,6 | 3,00 | | 7 |
| | 180 | 111 | 3,00 | | 10 |
| | 147 | 135 | 3,00 | | 12 |
| | 118 | 169 | 3,00 | | 15 |
| 92,8 | 215 | 3,00 | 20 | | |
| 3,0 | 356 | 76,5 | 2,20 | HZ522 | 5 |
| | 257 | 106 | 2,20 | | 7 |
| | 180 | 151 | 2,20 | | 10 |
| | 147 | 185 | 2,20 | | 12 |
| | 118 | 231 | 2,20 | | 15 |
| 92,8 | 293 | 2,20 | 20 | | |
| 4,0 | 350 | 104 | 2,75 | HZ523 | 5 |
| | 256 | 142 | 2,75 | | 7 |
| | 183 | 198 | 2,75 | | 10 |
| | 148 | 246 | 2,75 | | 12 |
| | 124 | 293 | 2,75 | | 15 |
| 88,3 | 411 | 3,30 | HA635 | 20 | |

MOTOR DATA HPS - ULTRA PREMIUM EFFICIENCY



| Size | Rated speed | Rated power | Rated torque | Peak torque | Voltage constant | Torque constant | BEMF at rated speed | Rated current | Efficiency IES |
|---------|-------------|----------------------|----------------------|-----------------------|----------------------|------------------------|-----------------------|------------------------|----------------|
| | n 1/min | P _n kW | M _n Nm | M _{pk} Nm | K _e Vs | K _t Nm/A | E _n Vrs | I _n Arms | η % |
| HPS 71 | 1800 | 0,75 | 4,0 | 11,9 | 1,45 | 2,5 | 272 | 1,6 | 86,7 |
| HPS 90 | 1800 | 1,1 | 5,8 | 17,5 | 1,45 | 2,5 | 272 | 2,3 | 88,1 |
| HPS 90 | 1800 | 1,5 | 8,0 | 23,9 | 1,45 | 2,5 | 272 | 3,2 | 89,1 |
| HPS 90 | 1800 | 2,2 | 11,7 | 35,0 | 1,45 | 2,5 | 272 | 4,6 | 90,2 |
| HPS 90 | 1800 | 3 | 15,9 | 47,7 | 1,45 | 2,5 | 272 | 6,3 | 91,0 |
| HPS 112 | 1800 | 4 | 21,2 | 63,7 | 1,45 | 2,5 | 272 | 8,4 | 91,8 |

VARIABLE FREQUENCY DRIVES (VFD)



Compact, reliable and easy to use

Simply power on and Optidrive E3 is up and running, providing precise motor control and energy savings using the factory settings.

Range:

0,37kW – 37/22kW / 0,5HP – 50/30HP
110 – 480V Single & 3 Phase Input

Features:

- Sensorless Vector Control for all Motor Types
- Simple Commissioning
- Intuitive Keypad Control
- Internal Category C1 EMC Filter
- Application Macros
- Options & Software



High performance and easy to use

The perfect combination of high performance together with ease of use allows even the most demanding applications to be tackled easily by the Optidrive P2 variable frequency drive.

Range:

0,75kW – 250kW / 1HP – 350HP
200 – 600V Single & 3 Phase Input

Features:

- Advanced Sensorless Vector Control for all Motor Types
- Closed Loop Control
- Extensive Analog & Digital I/O
- Machine Safety (STO)
- Advanced Communication and Diagnostics
- Built-in EMC Filter
- Integral Brake Transistor
- Options & Software

SHAPING THE FUTURE TOGETHER

Sumitomo Heavy Industries (SHI) is a leading global innovator, manufacturer and distributor of power transmission and control (PTC) equipment that is known under the Sumitomo Drive Technologies brand.

Our strategy is to strengthen and expand our business through the integration of new technologies in the areas of highly efficient electric motors and energy saving variable frequency drives (VFD).

The strategy also includes global growth in target segments such as robotics and positioning, material handling and intralogistics, and food and beverages.

As part of this strategy we invested in new partnerships which not only expanded the SHI family, but also grew our product portfolio and global reach.

Lafert Group is a world-leader in the design and manufacture of super premium efficiency electric motors for industrial use. With our focus on innovation and customization we aim to improve performance and reduce environmental impact.

In 2019, Invertek Drives Ltd has been part of SHI. Invertek is a global innovator and manufacturer of energy-saving VFDs. It has undergone year-on-year growth over the past 24 years, including the development of enhanced research and development facilities and the expansion of its global manufacturing facility.

Bringing together Lafert's motor and Invertek's VFD technology allows Sumitomo Drive Technologies to extend its product portfolio in the motor control industry.

This has become increasingly important as demand for IoT, automation, labour productivity and energy-saving solutions also increases.

Moreover, these partnerships will be forged in the technology hub of Europe while responding to the advanced market needed of our customers in EMEIA and around the world.

The union of three such large companies as Sumitomo Drive Technologies, Lafert Group and Invertek Drives elevates our operational vision, triggering the design evolution, especially in the field of integrated solutions and solidifying the strength of our position within EMEIA markets.

Our technology is enhancing society, supporting our customers, people and communities, economically, socially and environmentally on a global scale.

We have created a powerful claim - a statement that sets a long-term goal and represents the ideal to which we aim to "Shape the Future Together".

www.shapingthefuturetogether.com

Shaping the future together



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