**New Coupling Adapters for the IEC Motor Sizes 200/225**

Newly designed coupling adapters (IAK) for the mounting of IEC motors of the sizes 200/225 (B5) are available by midyear. With this diversification Watt Drive completes the coupling adapter system up to a motor rated power of 45kW (4-poled). The torque transmission between drive motor and gearbox is realised with the help of form-fit, low backlash claw coupling. The elastomer insert (98 Shore A) dampens efficiently emerging vibrations and impacts.

**Coupling adapter IAK with integrated backstops:**

For the IAK adapters of the sizes 100 – 225 (2.2 – 45kW, 4-poled), integrated backstops are available for the customer. They can be used for applications at which a locking direction is needed (e.g.: inclined conveyor belts).

The backstops are working with centrifugal lift-off sprags, by which they rotate contactless from a certain speed on. This results in a low-maintenance and loss-free solution. Through the integrated design, standard IEC motors of different manufacturers can be used without an additional setup. Thus an uncomplicated motor exchange is ensured.

Integrated design:

The backstops are implemented directly into the adapter housing. That means, the dimensions are identical to the adapters without backstops.

Determination of the rotating with the order:

When ordering a gearbox with backstop in the adapter, the desired rotating direction has to be indicated. The rotating direction is defined in accordance with the output shaft of the gearbox. In order to avoid any damage, the rotating direction of the drive should be checked before the start-up of the plant.

**Explosion-proof gearboxes with IEC adapters:**

WATT gearboxes according to ATEX can as well be used for gas- (G) or dust explosion protection (D). For the mounting of explosion-proof motors, the gearboxes are delivered with IEC adapters. In combination with the explosion-proof motors of WEG, the drives can be used for the following Ex areas:



Chart 1: Zoning for explosion-protected WATT gearboxes

**Advantages for the customer:**

* Easy mounting and demounting of IEC B5 motors in the sizes (100 - 225)
* With integrated backstop on customers demand
* Certified in explosion-proof areas
* Elastic claw coupling for effective damping of vibrations

**Technical data of the IEC adapters (IAK) type series:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **100    112** | **132** | **160** | **180** | **200** | **225** |
| **Coupling bore** | Ø28 H7 | Ø38 H7 | Ø42 H7 | Ø48 H7 | Ø55 H7 | Ø60 H7 |
| **Flange** | Ø250 | Ø300 | Ø350 | | Ø400 | Ø450 |
| **Centring** | Ø180 H7 | Ø230 H7 | Ø250 H7 | | Ø300 H7 | Ø350 H7 |
| **Screw hole circle** | Ø215 | Ø265 | Ø300 | | Ø350 | Ø400 |
| **Fixing bore** | 4xØ14 | 4xØ14 | 4xØ18 | | 4xØ18 | 8xØ18 |
| **Coupling star** | 98 shore A - red | | | | | |
| **Coupling rated torque** | 60 Nm | 325 Nm | | | 530 Nm | |
| **Permitted input speed** | 2800 min-1 | | | | 2000 min-1 | |
| **Mass moment of inertia** | 0.001 kgm² | 0.007 kgm² | 0.007 kgm² | 0.007 kgm² | 0.020 kgm² | 0.020 kgm² |

Chart 2: Technical data