



Energy-efficient stirring and agitating technology



Who we are

Since its foundation in 1988, PTM mechatronics GmbH develops, produces and distributes internationally its own products within the product fields energy-efficient agitators, high-performance compressed air motors, electric gripping systems and space-saving drive technology. We always tailor our work to our company values: reliability, professionalism, partnership and open to new ideas.



PTM worldwide

Over the years, PTM mechatronics GmbH has evolved into a global player. This development is based on a network of professional and well-established sales partners all around the globe. Our products go through all necessary certifications of different countries to meet the requirements of regional provisions.

PTM
mechatronics

Nec

National Electrical
Code 505

Ex

2014 / 34 / EU

EAC

The EurAsian
Conformity mark

PTM is your reliable partner – worldwide

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The *eco-Series* at a glance

Perfect agitating results – energy-saving – functionally safe

Our eco-Series comprises products in the field of functionally safe agitation. This product range was developed to ease the sensitive handling of stirring and agitating technology in hazardous environments and make it worry-free. Our products are **ATEX certified by TÜV SÜD**. They are suitable for all sensitive environments including laboratory environments.

Your benefits at a glance

- Up to 90% less energy consumption
- Up to 90% less energy costs
- Speed control with scale
- Low noise emission 75db
- Stable speeds from 10 to 600 rpm
- High torque even at low speeds 4 to 288Nm
- Resilient to standstill
- Transmission optional
- Oil-free and silicone-free
- Connection block for overload protection
- IP67 waterproof

Advantages to electric motor

- Waterproof
- Resilient to standstill
- Easy frequent load change
- Lower weight and smaller installation dimensions
- Easy change of rotation direction
- Lower heat development
- Higher efficiency
- Lower susceptibility to heat, vibration and blows
- Higher operational safety due to its robust completely mechanical design
- Electromagnetically interference-free

Advantages to vane motor

- Higher torques
- Lower air consumption
- Low rotational speed without transmission possible
- Lower noise emission
- Higher efficiency
- Compact design



Energy-efficient

Our agitators convince by their extreme low consumption of compressed air. We achieve this by means of our PTM drive technology on the basis of the radial piston principle, which has already proven itself over decades. Compared to simple agitators, which are often driven with ordinary vane motors, they reduce the consumption of compressed air by up to 90% on the average.



**Cost savings of up to €540 per year.
Amortisation of the whole
acquisition within 1 year.**



| | |
|------------------------|-----------|
| Vane motor 35 000 L/h | €591/year |
| PTM PMO 1800 3 000 L/h | €51/year |

At 30-45 rpm | 14-15Nm | 0.0088 €/m³ | 8h/day

Functionally safe

Our products of the eco-Series ensure functional safety in hazardous environments – without any compromises. Certified by TÜV Süd, your agitating process in ATEX zone 1 or 0 is safe and carefree from now on. Our eco-Series provides a silicone-free and oil-free drive as standard

Highlights

- Zone separation between zone 1 and zone 0
- Hard-coated aluminium housing with grounding
- Oil-free drive
- Silicone-free and acetone-resistant sealings



Atex Zone 0:

- ATEX certification II 1/2 G Ex h IIC T6 Ga/Gb X
- ATEX certification II 1/2 D IIIC T85°C Da/Db X

Atex Zone 1:

- ATEX certificate II 2 G/D c T5 100

Precision made in Germany

We know that for a perfect agitating result it needs not only a reliable and safe drive technology. The relation between motor, agitator unit and stirring tank has to be adjusted thoroughly. Therefore, we analyse the interaction between the components in our own tests and refine the results continuously. We gladly will advise you which components fit together and how you can economically and safely achieve the perfect agitating result with tried and tested quality made in Germany.



ATEX agitator motor

Our ATEX agitator motors provide a functionally safe application in all ATEX environments all over the world. You can trust in an economical and homogeneous work process. The integrated connection block combines overpressure valve, throttle check valve, and silencer in one compact part for a safe and error-free connection to ensure the longevity of our motors.



Highlights

- Connector block with silencer, overpressure valve and throttle check valve
- Redundant overload protection
- ATEX certificate II 2 G/D c T5 100
- Hard-coated aluminium housing with grounding
- IP67 waterproof
- Oil-free and silicone-free
- Clockwise rotation
- 12 step regulator for exact rotational speed
- Memory function through anti-twist protection

Options

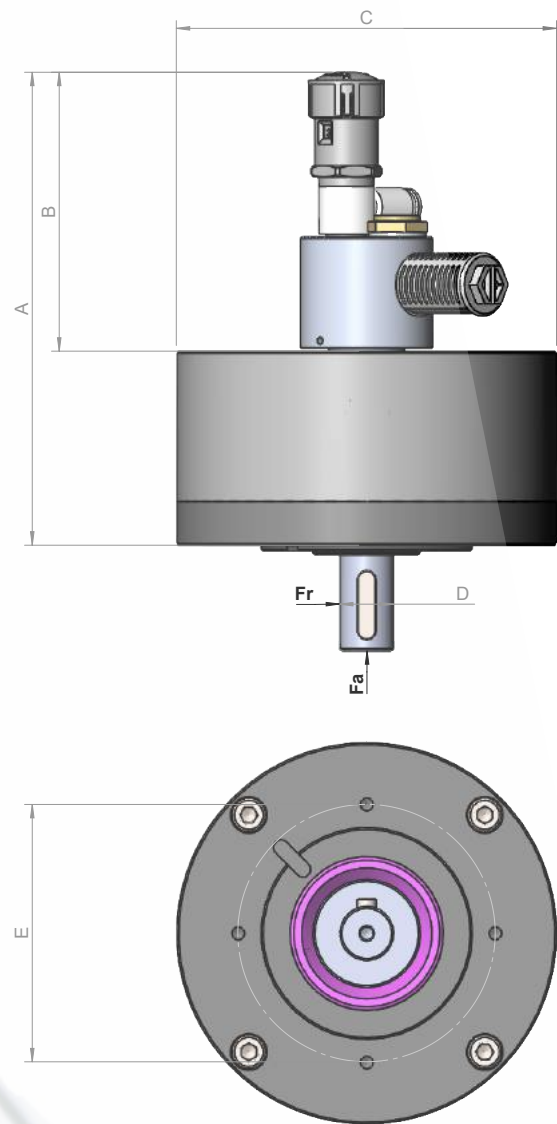
- Mounting angle
- Mounted speed-sensor
- Anticlockwise rotation

Exemplary applications

- Agitators
- Coating technology
- Chemical plant engineering
- Mills and milling plants
- Chemical process vessels
- Processing of paints, varnishes, adhesives, fillers and sealants



Motor with mounting angle



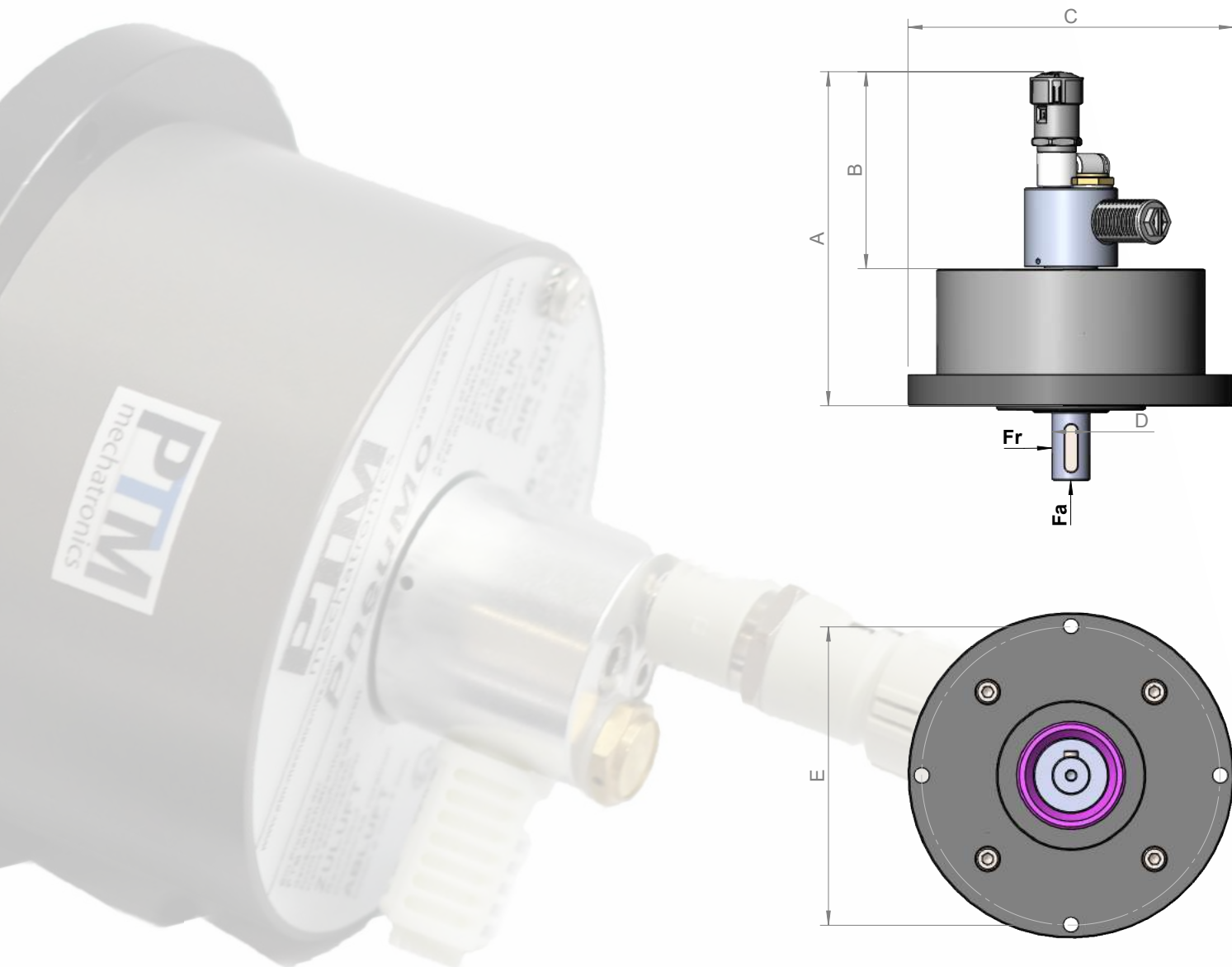
Technical data

| | PMO450EX | PMO900EX | PMO1800EX | PMO3600EX |
|--|---------------------------|---------------------------|----------------------------|----------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 8 Nm | 30 rpm – 300 rpm 16 Nm | 30 rpm – 300 rpm 32 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 4 Nm | 30 rpm – 600 rpm 8 Nm | 30 rpm – 600 rpm 16 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm | 10 rpm – 100 rpm 48 Nm | 10 rpm – 100 rpm 96 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm | 3.3 rpm – 33 rpm 144 Nm | 3.3 rpm – 33 rpm 288 Nm |
| A | 124mm | 138.5mm | 142mm | 164mm |
| B | 73mm | 73mm | 74mm | 74mm |
| C | Ø99mm | Ø99mm | Ø159mm | Ø159mm |
| D | Ø14h6 | Ø14h6 | Ø19h6 | Ø19h6 |
| E | Ø67mm | Ø67mm | Ø115mm | Ø115mm |
| Fr (radial force) | 400N | 400N | 800N | 800N |
| Fa (axial force) | 100N | 100N | 200N | 200N |

ATEX agitator motor - with mounting flange

Our ATEX agitator motor with integrated mounting flange provides an easy and quick mounting on your container.





Technical data

| | PMO450EX-B1 | PMO900EX-B1 | PMO1800EX-B1 | PMO3600EX-B1 |
|--|---------------------------|---------------------------|----------------------------|----------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 8 Nm | 30 rpm – 300 rpm 16 Nm | 30 rpm – 300 rpm 32 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 4 Nm | 30 rpm – 600 rpm 8 Nm | 30 rpm – 600 rpm 16 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm | 10 rpm – 100 rpm 48 Nm | 10 rpm – 100 rpm 96 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm | 3.3 rpm – 33 rpm 144 Nm | 3.3 rpm – 33 rpm 288 Nm |
| A | 124mm | 138.5mm | 142mm | 164mm |
| B | 73mm | 73mm | 74mm | 74mm |
| C | Ø120mm | Ø120mm | Ø199mm | Ø199mm |
| D | Ø14h6 | Ø14h6 | Ø19h6 | Ø19h6 |
| E | Ø110mm | Ø110mm | Ø180mm | Ø180mm |
| Fr (radial force) | 400N | 400N | 800N | 800N |
| Fa (axial force) | 100N | 100N | 200N | 200N |

ATEX agitator drive – zone 1 – with bearing flange

Functional safety in ATEX zone 1

You get a complete product comprising drive with integrated connection block and bearing flange. The bearing flange provides stability even with extreme radial load. Thus, it is possible to agitate safely in large containers and viscid fluids.

As the drive is IP67 waterproof, it can come into contact with fluids worry-free. This is important with regard to the fluids inside the containers as well as an easy cleaning.



*For extreme
radial load*



Highlights

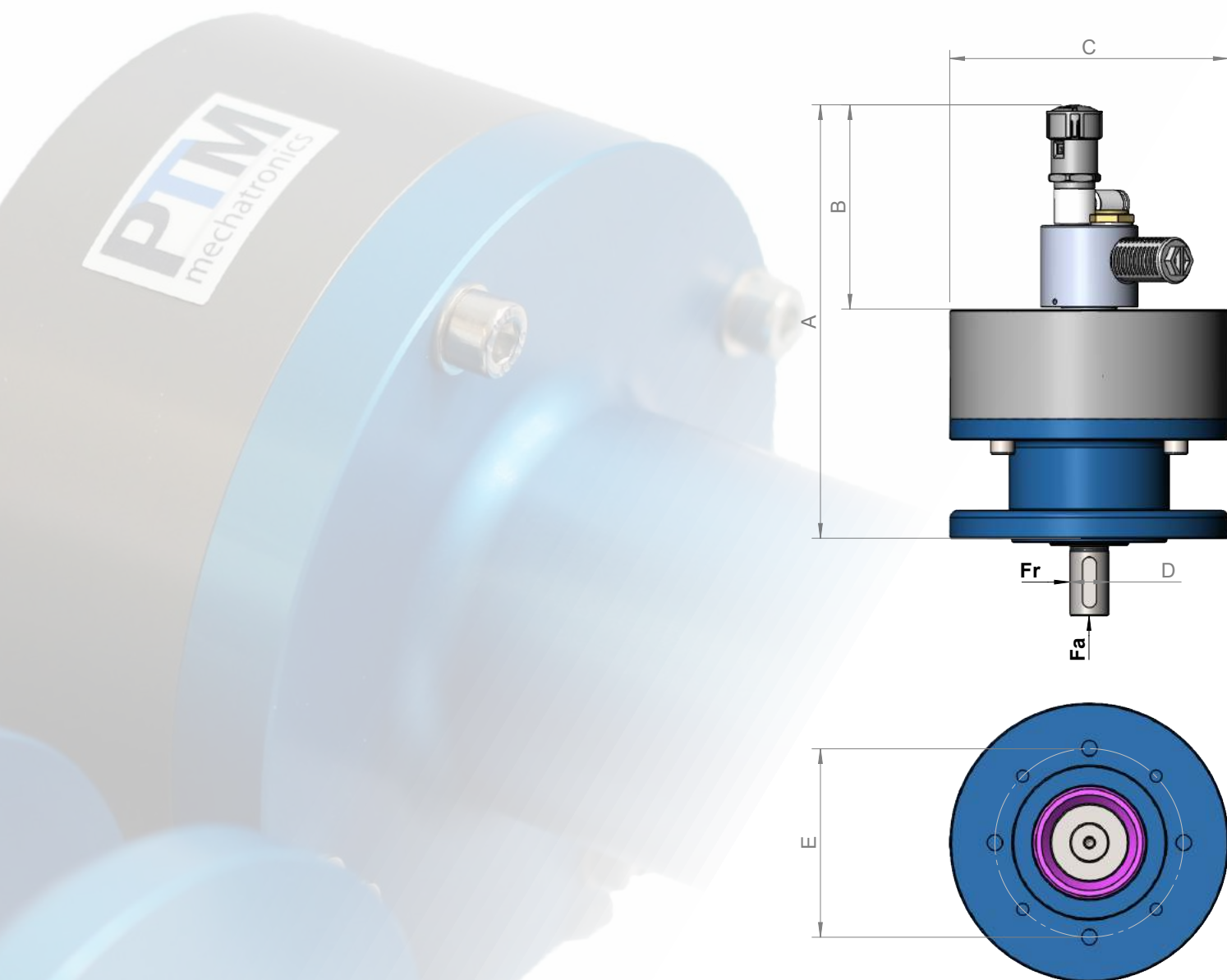
- Bearing flange allows extreme radial load
- Application in IBC containers up to 1000 liters
- ATEX certificate II 2 G/D c T5 100
- IP67 waterproof

Options

- Mounted speed-sensor
- Anticlockwise rotation
- eco-Traversal for fast and easy mounting on container
- eco-Stirrer elements
- Shafts available in various lengths

Our recommendation: Agitator system – eco-Mix Zone I

See page 14



Technical data

| | PMO450EX-B3 | PMO900EX-B3 | PMO1800EX-B3 | PMO3600EX-B3 |
|--|---------------------------|---------------------------|----------------------------|----------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 8 Nm | 30 rpm – 300 rpm 16 Nm | 30 rpm – 300 rpm 32 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 4 Nm | 30 rpm – 600 rpm 8 Nm | 30 rpm – 600 rpm 16 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm | 10 rpm – 100 rpm 48 Nm | 10 rpm – 100 rpm 96 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm | 3.3 rpm – 33 rpm 144 Nm | 3.3 rpm – 33 rpm 288 Nm |
| A | 155mm | 169.5mm | 180mm | 202mm |
| B | 73mm | 73mm | 74mm | 74mm |
| C | Ø99mm | Ø99mm | Ø199mm | Ø199mm |
| D | Ø14h6 | Ø14h6 | Ø19h6 | Ø19h6 |
| E | Ø67mm | Ø67mm | Ø115mm | Ø115mm |
| Fr (radial force) | 2000N | 2000N | 3000N | 3000N |
| Fa (axial force) | 100N | 100N | 200N | 200N |

ATEX agitator drive – zone 0/1 – with zone separation flange

Functional safety in ATEX zone 0

You get a complete product comprising drive with integrated connection block and zone separation flange. The zone separation flange enables the worry-free agitating process in ATEX zone 0. Additionally, it provides stability even with extreme radial load. Thus, it is possible to agitate safely in large containers and viscid fluids.

As the drive is IP67 waterproof, it can come into contact with fluids worry-free. This is important with regard to the fluids inside the containers as well as an easy cleaning.

Highlights

- Zone separation flange allows extreme radial load
- Application in IBC containers up to 1000 liters
- Ex II 1/2 G Ex h IIC T6 Ga/Gb X
- Ex II 1/2 D Ex h IIIC T85°C Da/Db X
- Pluggable drive shafts
- Oil-free and silicone-free

Direct mounting on a container – zone 0

We recommend our agitator system eco-Topmix Zone 0

See page 18

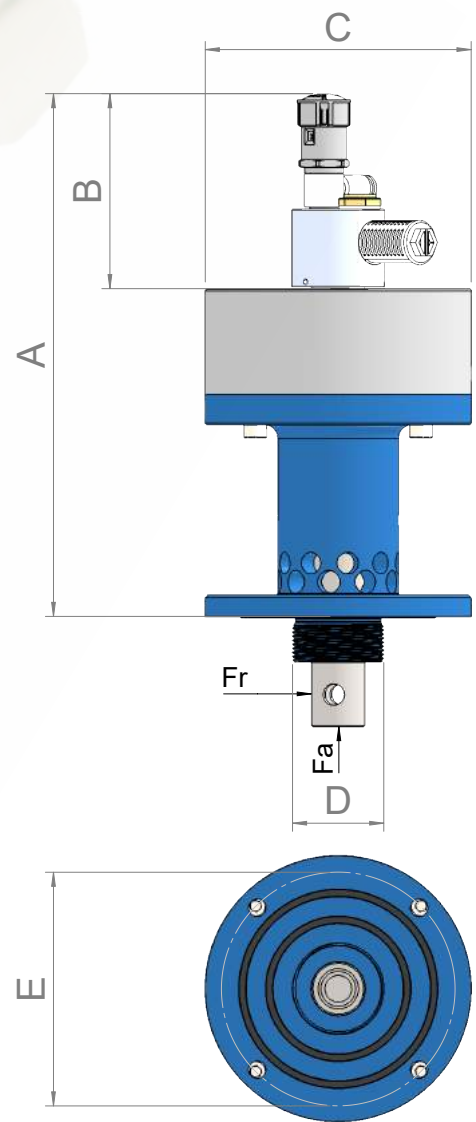


**Flexible eco-Traverse
for quick mounting
See page 24**



Options

- Mounted speed-sensor
- Anticlockwise rotation
- eco-Traverse for fast and easy mounting on container
- eco-Stirrer elements
- Shafts available in various lengths



Technical data

| | ECO Serie 0450 | ECO Serie 0900 | ECO Serie 1800 | ECO Serie 3600 |
|--|----------------------------|----------------------------|-----------------------------|-----------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 8 Nm | 30 rpm – 300 rpm 16 Nm | 30 rpm – 300 rpm 32 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 4 Nm | 30 rpm – 600 rpm 8 Nm | 30 rpm – 600 rpm 16 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm | 10 rpm – 100 rpm 48 Nm | 10 rpm – 100 rpm 96 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm | 3.3 rpm – 33 rpm 144 Nm | 3.3 rpm – 33 rpm 288 Nm |
| A | 195mm | 210mm | 219mm | 241mm |
| B | 73mm | 73mm | 74mm | 74mm |
| C | Ø99mm | Ø99mm | Ø159mm | Ø159mm |
| D | M34x1.5 | M34x1.5 | M44x1.5 | M44x1.5 |
| E | 4x90°; Ø6.5mm LK: Ø87mm | 4x90°; Ø6.5mm LK: Ø87mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm |
| Fr (radial force) | 700N | 700N | 1000N | 1000N |
| Fa (axial force) | 100N | 100N | 200N | 200N |

Agitator system *eco-Mix Zone 1*

Functional safety in ATEX zone 1

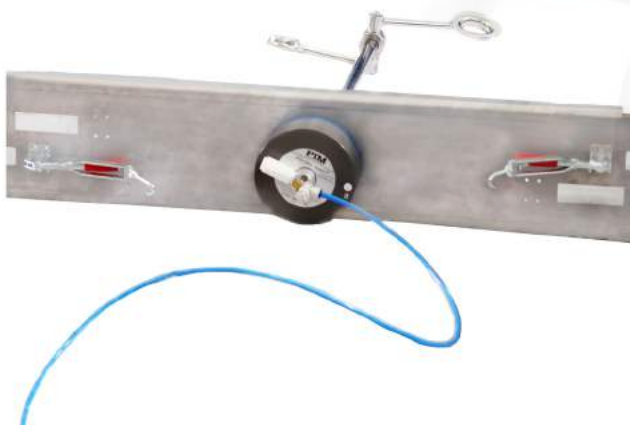
You get a complete product comprising ATEX agitator motor with integrated connection block, bearing flange, drive shaft and stirrer element. Our complete agitator systems eco-Mix are perfectly matched to the common standard hobcock sizes (please see table Technical data p. 17). With our optional eco-Traverse, the eco-Mix can easily be fixed to your open or closed container.

Highlights

- Bearing flange allows extreme radial load
- Application in IBC containers up to 1000 liters
- Ex II 1/2 G Ex h IIC T6 Ga/Gb X
- Ex II 1/2 D Ex h IIIC T85°C Da/Db X
- IP67 waterproof
- Pluggable drive shafts
- oil-free and silicone-free

Optional eco-Traverse – see page 24

*Clamp, connect → that's it.
Total weight less than 5 kg*





- 12 step regulator for exact rotational speed
- Memory function through anti-twist protection

Container sizes



**IBC Container
600-1000 liters**

220 liters

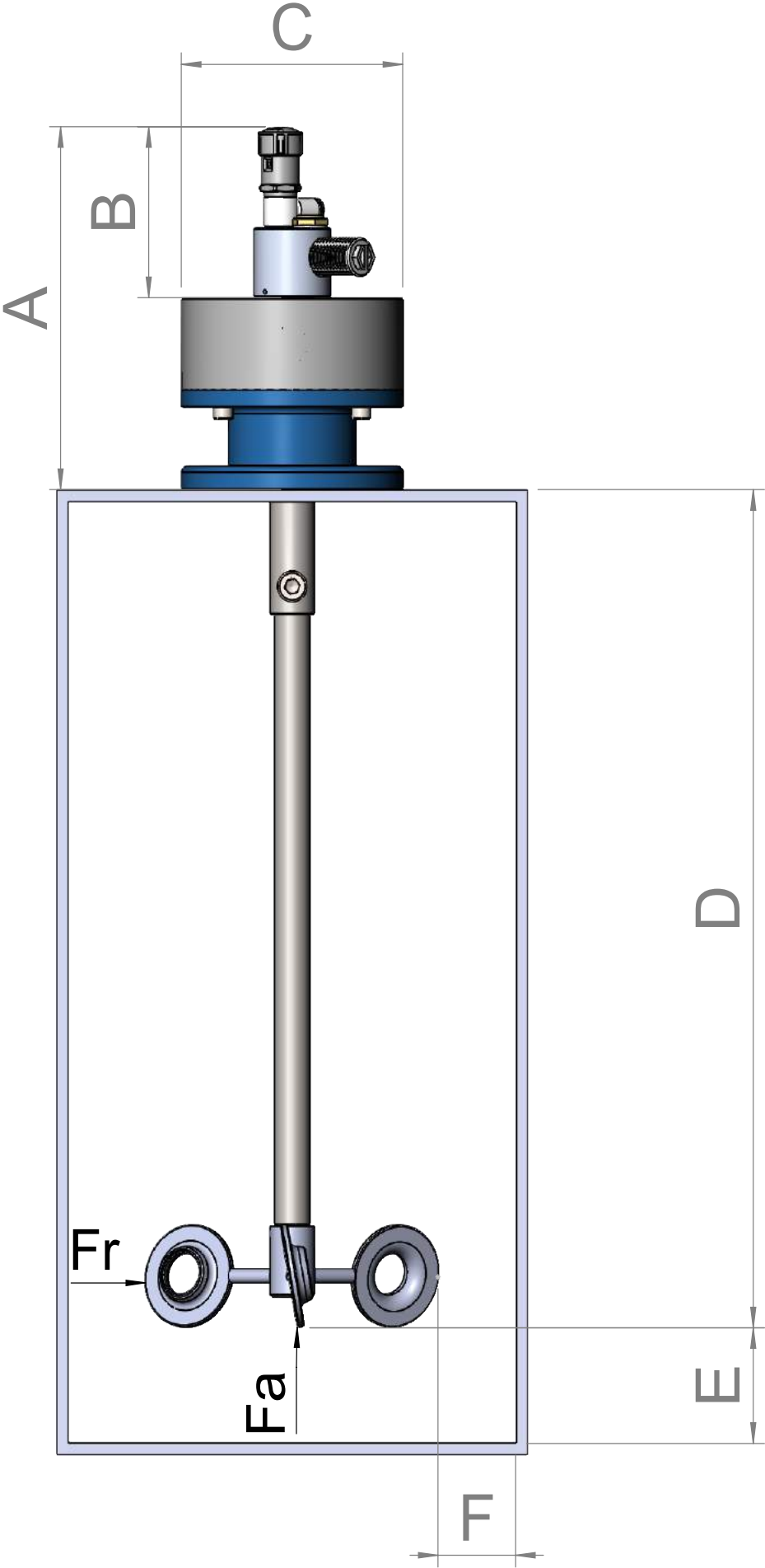
110 liters

60 liters

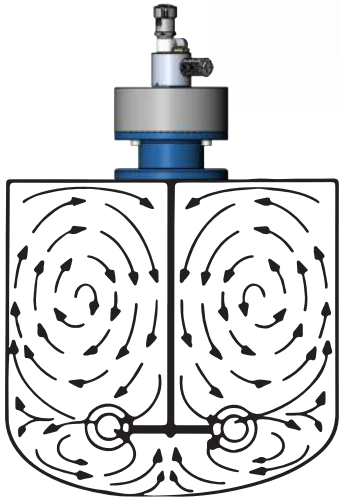
30 liters



Agitator system *eco-Mix Zone 1*



Because of the high momentum, the whole container content is in motion and homogenized with just one agitator stage within a short period of time; without any baffles or sediments.





Technical data

| | ECO MIX 30L | ECO MIX 60L | ECO MIX 110L | ECO MIX 220L | ECO MIX 600L | ECO MIX 1000L |
|--|------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 8 Nm | 30 rpm – 300 rpm 16 Nm | 30 rpm – 300 rpm 32 Nm | 30 rpm – 300 rpm 32 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 4 Nm | 30 rpm – 600 rpm 8 Nm | 30 rpm – 600 rpm 16 Nm | 30 rpm – 600 rpm 16 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm | 10 rpm – 100 rpm 48 Nm | 10 rpm – 100 rpm 96 Nm | 10 rpm – 100 rpm 96 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm | 3.3 rpm – 33 rpm 144 Nm | 3.3 rpm – 33 rpm 288 Nm | 3.3 rpm – 33 rpm 288 Nm |
| A | 155mm | 169.5mm | 180mm | 202mm | 180mm | 202mm |
| B | 73mm | 73mm | 74mm | 74mm | 74mm | 74mm |
| C | Ø99mm | Ø99mm | Ø199mm | Ø199mm | Ø199mm | Ø199mm |
| D | 298mm | 488mm | 685mm | 720mm | 840mm | 840mm |
| E (minimum distance axial) | 25mm | 25mm | 25mm | 25mm | 25mm | 25mm |
| Fr (radial force) | 25mm | 25mm | 25mm | 25mm | 25mm | 25mm |
| Fa (axial force) | 75N | 50N | 50N | 50N | 40N | 40N |
| Fa (axial force) | 100N | 100N | 200N | 200N | 200N | 200N |
| Stirrer element | 170mm | 210mm | 260mm | 320mm | 500mm clapable | 500mm clapable |
| Drive shaft | 200mm | 392mm | 617mm | 640mm | 557mm | 557mm |
| Container hole diameter | 35mm | 35mm | 45mm | 45mm | 45mm | 45mm |
| Drilling pattern | 4x90°; Ø5.5mm LK: Ø87mm | 4x90°; Ø5.5mm LK: Ø87mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm |

Agitator system *eco-Topmix Zone 0*

Functional safety in ATEX zone 0/1

You get a complete product comprising ATEX agitator motor with integrated connection block, zone separation flange, drive shaft and stirrer element. Our agitator systems *eco-Topmix* are perfectly matched to the common standard hobbock sizes (please see table Technical data p. 21). Finally, you just need to fix your *eco-Topmix* to your open or closed container – ready and functionally safe without compromises.

Highlights

- Zone separation flange allows extreme radial load
- Application in IBC containers up to 1000 liters
- Ex II 1/2 G Ex h IIC T6 Ga/Gb X
- Ex II 1/2 D Ex h IIIC T85°C Da/Db X
- IP67 waterproof
- Pluggable drive shafts

Options

- *eco-Transpose*
- Stainless-steel counter nut with PTFE seal
- Overpressure protected sealing



*Clamp, connect → that's it.
Total weight less than 5 kg*

Stainless-steel counter nut with PTFE seal





- 12 step regulator for exact rotational speed
- Memory function through anti-twist protection

Container sizes



**IBC Container
600-1000 liters**

220 liters

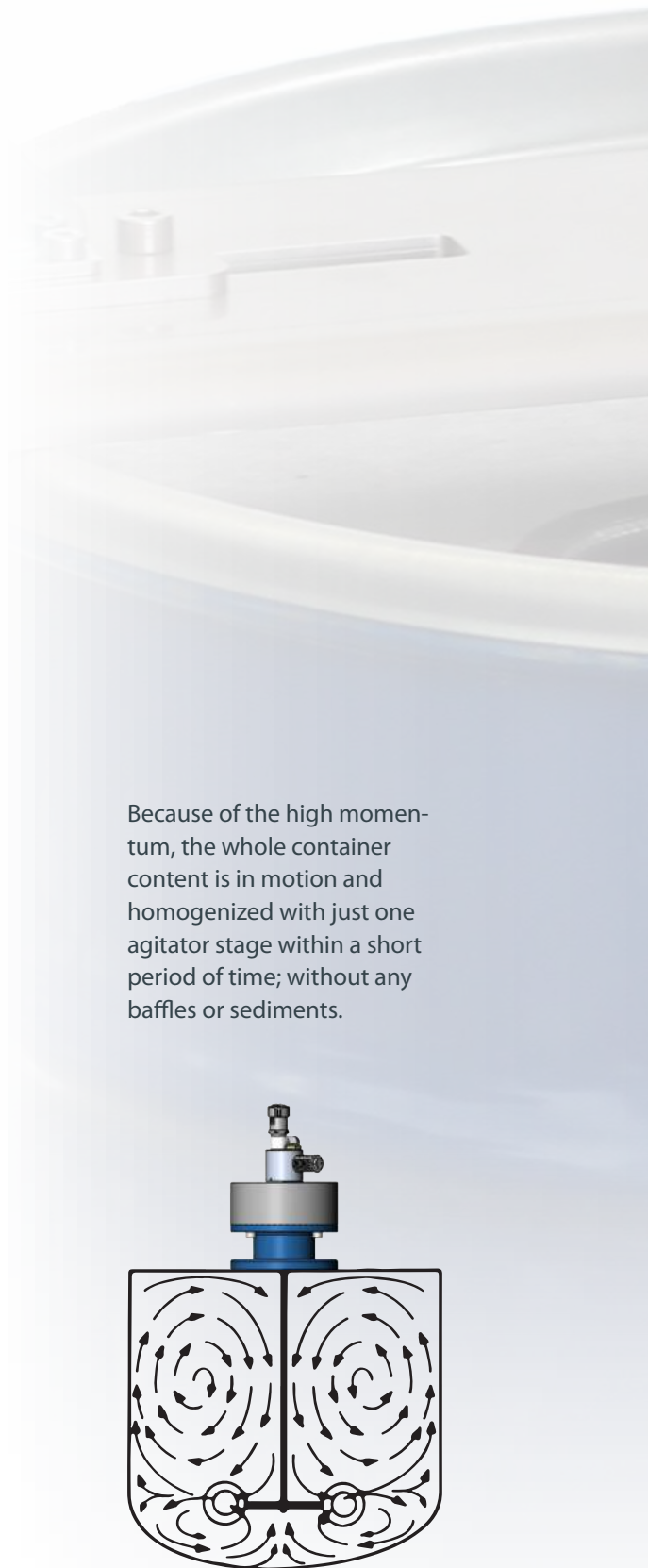
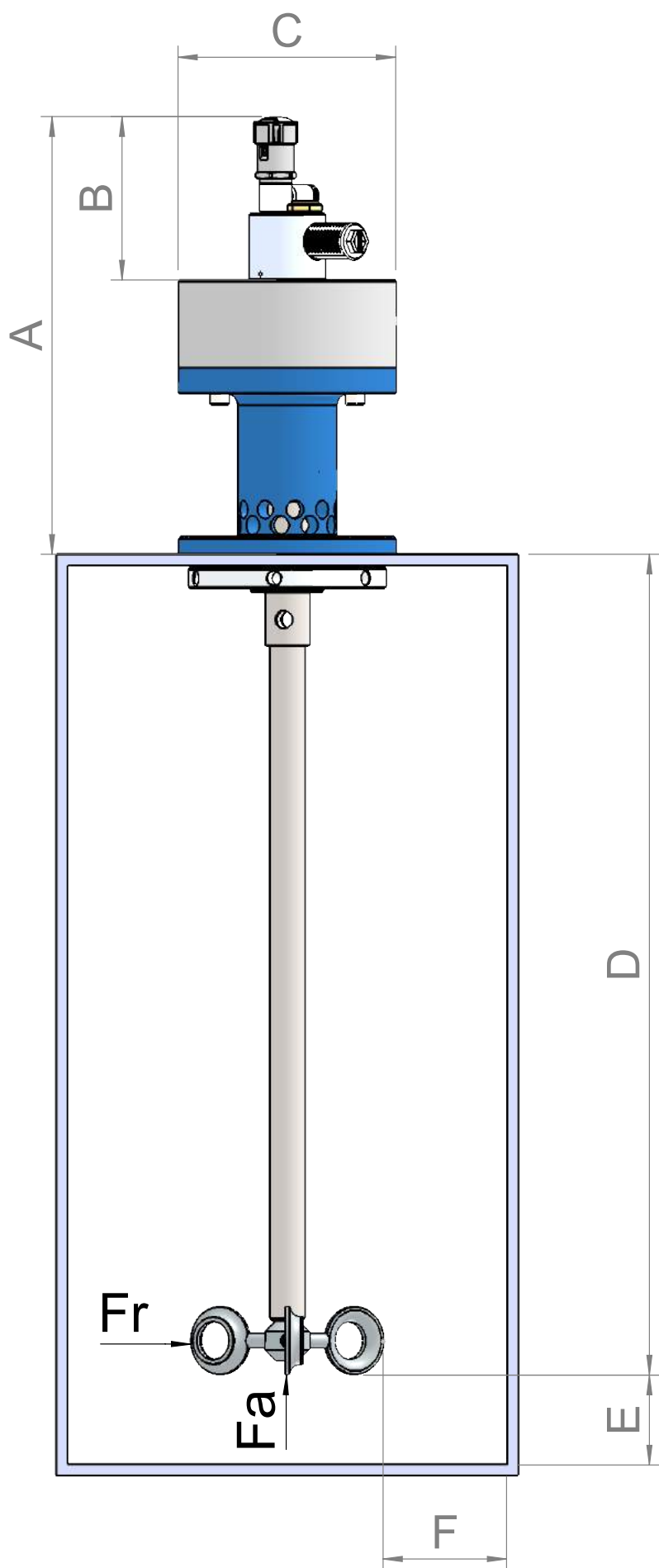
110 liters

60 liters

30 liters



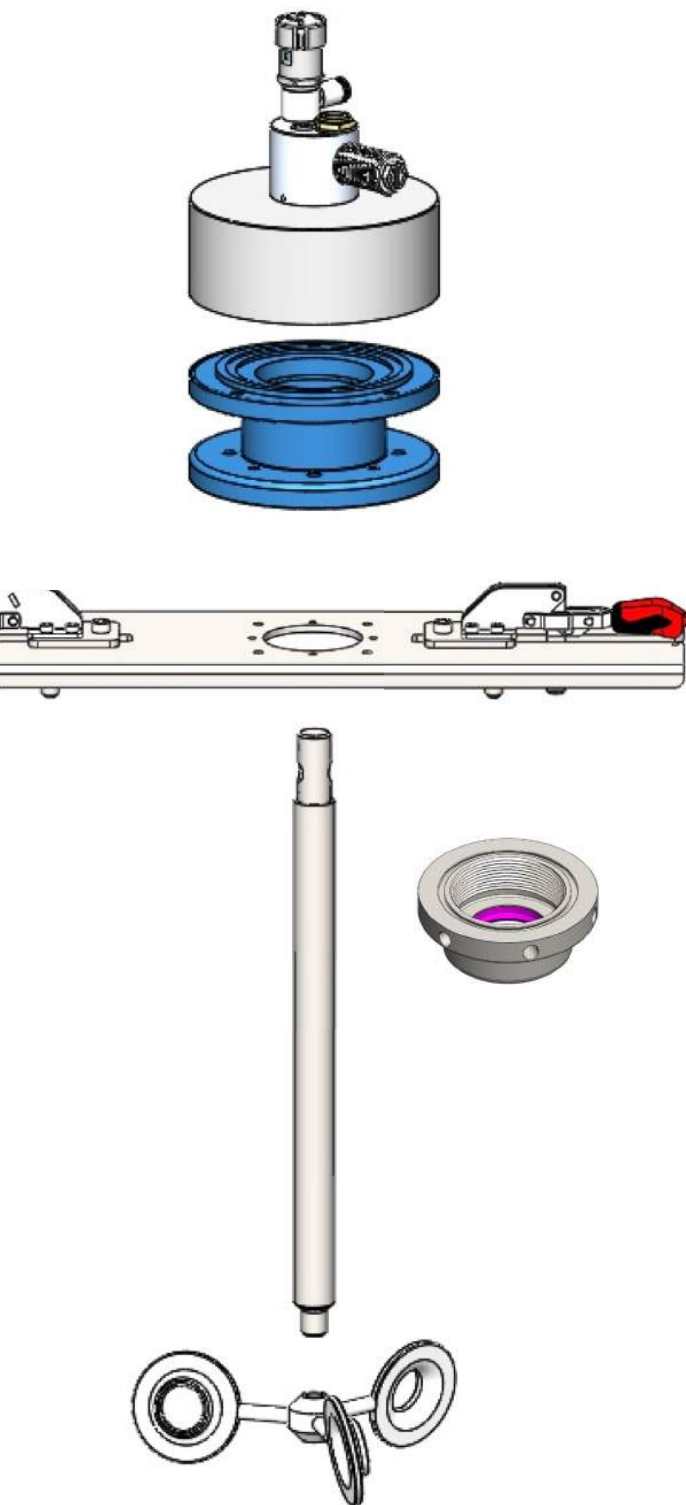
Agitator system *eco-Topmix Zone 0*



Because of the high momentum, the whole container content is in motion and homogenized with just one agitator stage within a short period of time; without any baffles or sediments.

Technical data

| | ECO TOPMIX 30L | ECO TOPMIX 60L | ECO TOPMIX 110L | ECO TOPMIX 220L | ECO TOPMIX 600L | ECO TOPMIX 1000L |
|--|------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300 rpm 8 Nm | 30 rpm – 300 rpm 16 Nm | 30 rpm – 300 rpm 32 Nm | 30 rpm – 300 rpm 32 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 2 Nm | 30 rpm – 600 rpm 4 Nm | 30 rpm – 600 rpm 8 Nm | 30 rpm – 600 rpm 16 Nm | 30 rpm – 600 rpm 16 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm | 10 rpm – 100 rpm 48 Nm | 10 rpm – 100 rpm 96 Nm | 10 rpm – 100 rpm 96 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm | 3.3 rpm – 33 rpm 144 Nm | 3.3 rpm – 33 rpm 288 Nm | 3.3 rpm – 33 rpm 288 Nm |
| A | 195mm | 210mm | 219mm | 241mm | 219mm | 241mm |
| B | 73mm | 73mm | 74mm | 74mm | 74mm | 74mm |
| C | Ø99mm | Ø99mm | Ø199mm | Ø199mm | Ø199mm | Ø199mm |
| D | 298mm | 488mm | 685mm | 720mm | 840mm | 840mm |
| E (minimum distance axial) | 25mm | 25mm | 25mm | 25mm | 25mm | 25mm |
| Fr (radial force) | 25mm | 25mm | 25mm | 25mm | 25mm | 25mm |
| Fa (axial force) | 75N | 50N | 50N | 50N | 40N | 40N |
| Fa (axial force) | 100N | 100N | 200N | 200N | 200N | 200N |
| Stirrer element | 170mm | 210mm | 260mm | 320mm | 500mm clapable | 500mm clapable |
| Drive shaft | 200mm | 392mm | 617mm | 640mm | 557mm | 557mm |
| Container hole diameter | 35mm | 35mm | 45mm | 45mm | 45mm | 45mm |
| Drilling pattern | 4x90°; Ø5.5mm LK: Ø87mm | 4x90°; Ø5.5mm LK: Ø87mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm | 4x90°; Ø8.5mm LK: Ø125mm |



| Drive selection | Nm |
|-----------------|----|
| my-eco 450 | 4 |
| my-eco 900 | 8 |
| my-eco 1800 | 16 |
| my-eco 3600 | 32 |

Drive selection
my-eco 450 to 3600

| Zone 1 | Zone 0/1 |
|--------|----------|
| Z1 | Z0/1 |
| | |

| eco-Traversal |
|---|
| eco-Traversal for 30 to 60 liters hobbock |
| eco-Traversal for 110 to 220 liters containers |
| eco-Traversal for 600 to 1000 liters IBC containers |

| Counter nut |
|--|
| Stainless-steel counter nut with PTFE seal |

| Drive shaft |
|-----------------|
| AW (0-800mm) |

| Element | Diameter / Options |
|-----------|--|
| eco-Disc | 60-700mm transmission, sliding hub, foldable |
| eco-Cup | |
| eco-Blade | |



eco-Disc



eco-Cup



eco-Blade

my-eco - my agitator

With my-eco, we offer you our whole eco-Series product range for the individual configuration of your agitator. You can select all components necessary for your application. Should you need any assistance, we are happy to advice you, even on site.

Step 1 Please select the drive for your agitator by means of the torque.

Step 2 Do you need the agitator for ATEX zone 0 with zone separation flange Z0/1 or for zone 1 with bearing flange Z1?

| Zone | Atex certificate |
|------|--|
| Z1 | Ex II 2 G/D c T5 100 |
| Z0/1 | Ex II 1/2 G Ex h IIC T6 Ga/Gb X Ex II 1/2 D Ex h IIIC T85°C Da/Db X |

Step 3 Add our flexible eco-Traverse to your agitator for the easy and quick mounting on all open or closed containers with just two clicks.

Step 4 When selecting ATEX zone 0 in step 2, you can additionally select a stainless-steel nut with PTFE sealing for a pressure-tight connection. In case of overpressure or vacuum inside the container, for example when liquids are pumped into the container or exhausted, your agitator remains sealed.

Step 5 Please select the length of your drive shaft.

Step 6 Please select your stirrer element.

Now it is ready - your my-eco.

eco- Traverse

Highlights

- Stainless-steel traverse made of V4A stainless steel
- 3 traverses with different adjustable spans



Quick-action clamp

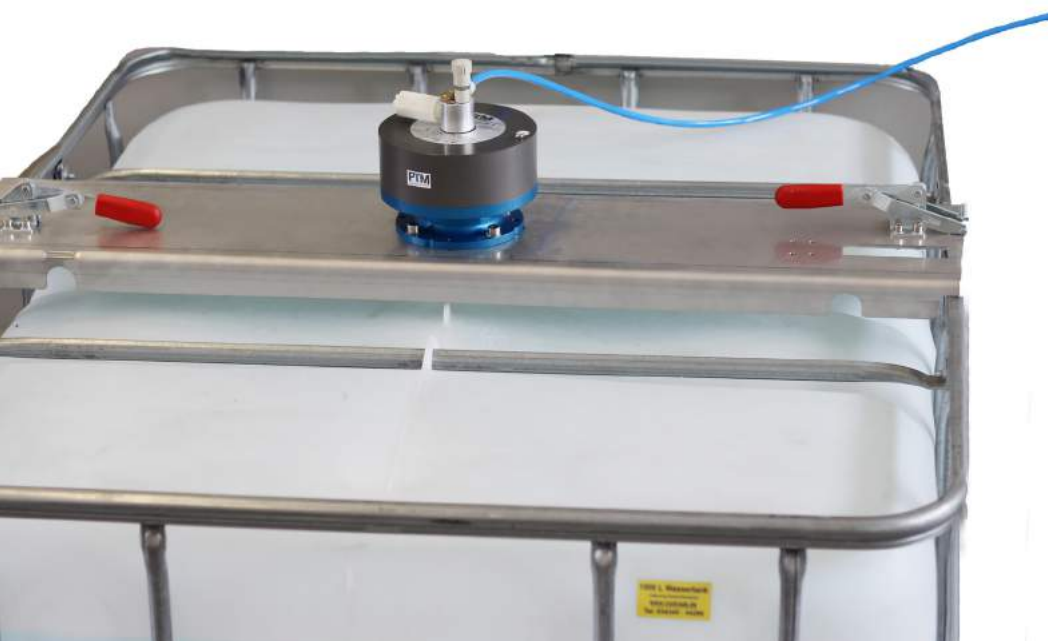


3 sizes available

eco-Traverse for 30 to 60 liters hobbock

eco-Traverse for 110 to 220 liters containers

eco-Traverse for 600 to 1000 liters IBC containers



Pressure-tight connection to IBC container

Laboratory agitator *eco-Lab*

ATEX certificate II 2 G/D c T5 100

Especially in laboratory environments, perfect agitating results are highly important. For these applications, we have developed our ATEX laboratory agitator eco-Lab for all applications on tripod.

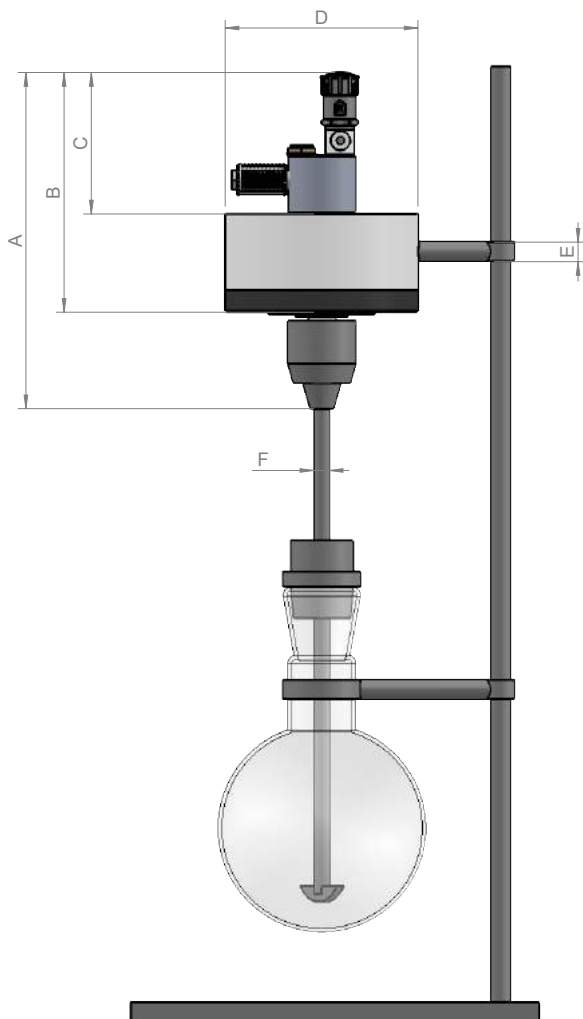
You get a complete product comprising drive and integrated connection block, quick-action chuck, mounting pin, drive shaft and stirrer element and an easy and carefree handling with absolute functional safety.

Highlights

- ATEX certificate II 2 G/D c T5 100
- Hard-coated aluminium housing with grounding
- Oil-free drive
- Several sealing concepts (silicone-free, Viton, acetone-resistant)
- IP67 waterproof

Exemplary application

- Agitators on tripod
- Chemical vessels
- Processing of paints, varnishes, adhesives, fillers and sealants



Technical data

| | eco-Lab 450 | eco-Lab 900 |
|--|------------------------------|------------------------------|
| Rotation speed Max. torque (without transmission) | 30 rpm – 300 rpm 4 Nm | 30 rpm – 300U/min 8 Nm |
| Rotation speed Max. torque (with transmission 1:2) | 60 rpm – 600 rpm 2 Nm | 60 rpm – 600 rpm 4 Nm |
| Rotation speed Max. torque (with transmission 3:1) | 10 rpm – 100 rpm 12 Nm | 10 rpm – 100 rpm 24 Nm |
| Rotation speed Max. torque (with transmission 9:1) | 3.3 rpm – 33 rpm 36 Nm | 3.3 rpm – 33 rpm 72 Nm |
| B | 191mm | 306mm |
| C | 73mm | 73mm |
| D | 99mm | 99mm |
| E | 10mm | 10mm |
| F (shaft diameter) | 0–13mm | 0–13mm |

Laboratory accessories

EX tripod

Technical details

- Laboratory stand with 74 cm laboratory rod
- 2 cross clamps



EX stirrer feedthrough

Material: PTFE EX
Temperature resistance: -15°C to +200°C
Chemical resistance: ++ very good
Conductivity: 1.000 kOhm

Product description

Ground joint cone made of static dissipative PTFE-EX with sealing rings on the outside to prevent sticking of the connection and to reduce the danger of breaking glass. A special gasket made of PTFE-EX and an FKM o-ring which is compressed by GL screw cap provide a good sealing of the stirrer shaft. Bore with female thread M5 on the knurl for earth connection.

Applications

Perfect bearing for stainless steel, glass and stirrer shafts EX



| Kern NS | für Rührwellen Ømm | Gesamtlänge mm ca. | Kappengewinde GL |
|---------|--------------------|--------------------|------------------|
| 29/32 | 8 | 71 | 18 |
| 29/32 | 10 | 72 | 25 |

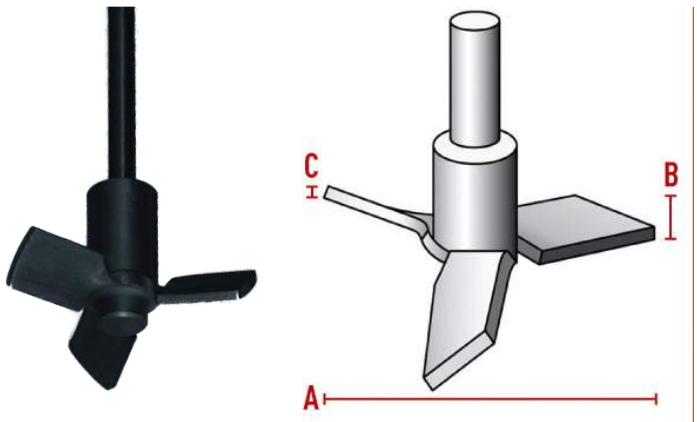
EX-Stirrer

Material: PTFE EX
Temperature resistance: -200°C to +250°C
Chemical resistance: ++ very good
Conductivity: 1.000 kOhm

Product description

PTFE-EX jacketed stainless-steel shaft, propeller completely made of PTFE-EX with three 45° angled round or angular blades, good chemical resistance. The mix only comes into contact with PTFE-EX.

The mix is sucked bottom-up, good axial flow with low shear force. Earthing is made for example via a stirrer seal made of PTFE-EX.

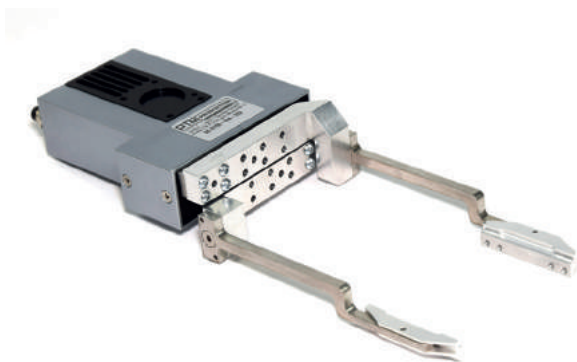


| Länge mm | Wellen Ømm | Spann Ømm | Flügelmaße laut Abbildung A - B - C mm |
|----------|------------|-----------|--|
| 350 | 8 | 6.5 | 75 - 18 - 3.0 |



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