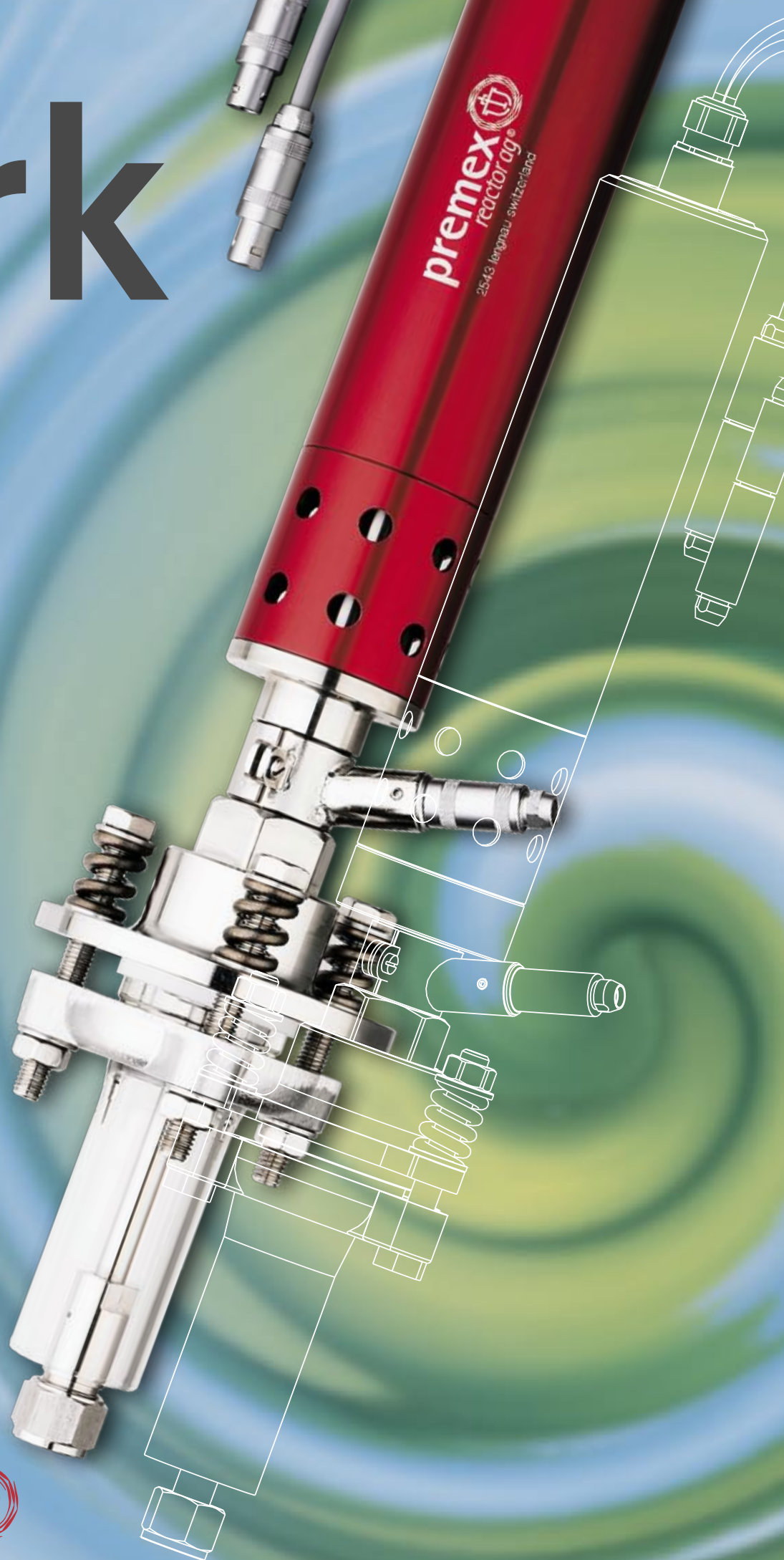


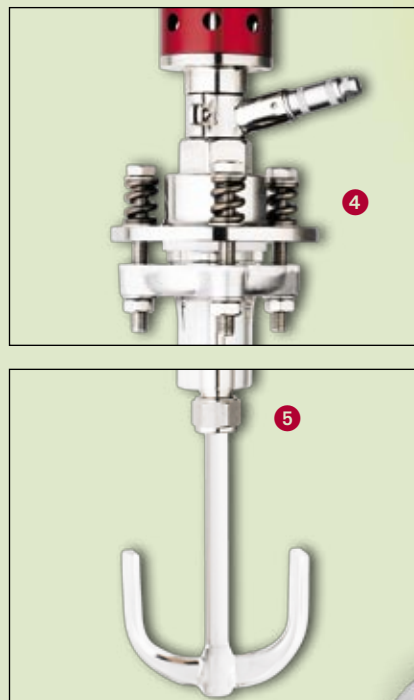
# redclark mrk



*When elegance and innovation merge together, unique combinations are created. Let us impress you with our trendsetter in RED. For the first time, a member of the RED family is available with a flange connection for glass reactors.*

## We set trends in RED

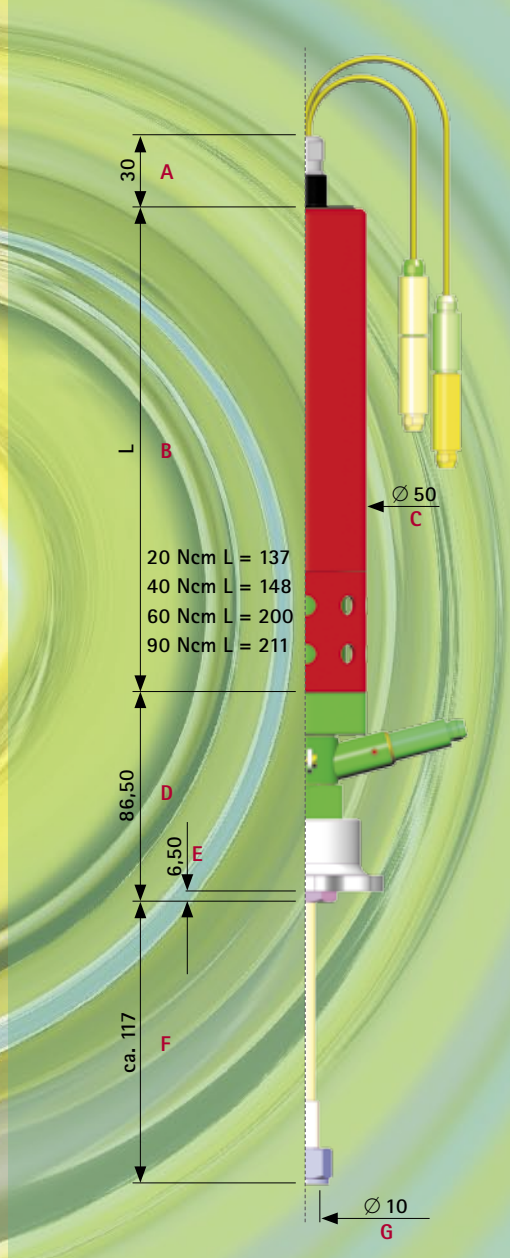
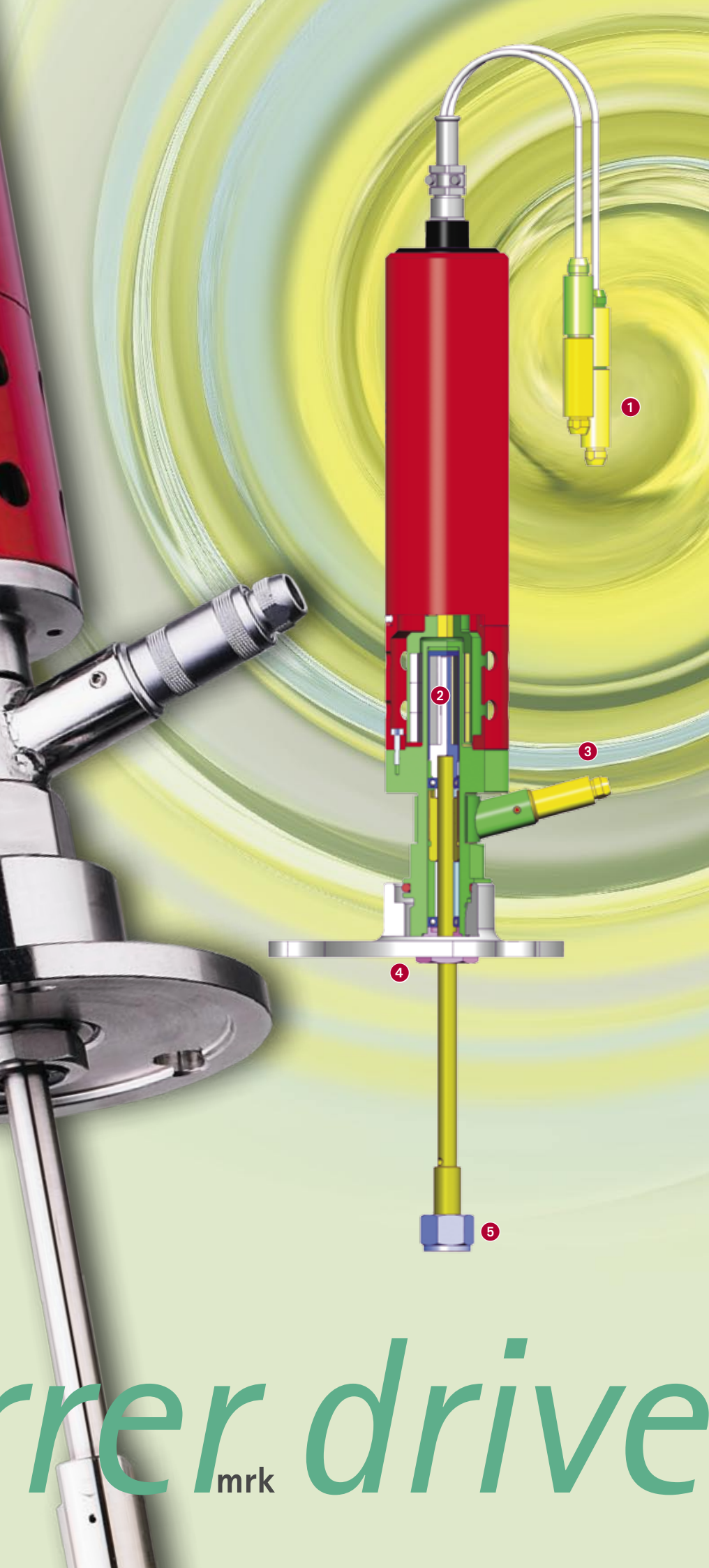
- 1 The two-part motor assembly permits the retooling of the macfix and macline magnetic stirrer heads to a variant with a 60 Watt micromotor. The magnetic stirrer drives are then called "redvoy", or "redclair" with the flange connection for glass reactors.
- 2 Mutually attracting magnetic fields are responsible for the non-contact rotation of the drive bell to the stirrer shaft. The secret lies in the transmission of force from the outer magnetic ring to the inner. The "redclair" is the strongest model in its class, with a torque of 90 Ncm.
- 3 The micromotor can be controlled via the printed circuit of the DZA-6/24 control unit. The speed readout also flows continually to the control unit.
- 4 The "redclair" has been designed with feeling, and has been laid out in such a functional manner that its operation becomes a pleasure. In addition to a replaceable flange concept, it also offers a well-thought-out sealing system.
  - All pressure parts with an M30 × 2 mm connection can be screwed onto the standard flange and are sealed by an O-ring.
  - The radial shaft seal is pressed into the hexagon cap nut (4) and thereby prevents the medium from penetrating into the inner area of the magnetic stirrer drive.
  - The flange seal takes on a double function. On the one hand, as a seal between the glass piston and the metal flange and, on the other, as a centring device for the glass cylinder.
  - Many possible combinations are thereby available to you with the flange sizes NW 25, NW 40 and NW 50 with four different torques of 20 Ncm, 40 Ncm, 60 Ncm or 90 Ncm.
- 5 In the RED line with flange, the replacement of the ball bearing is also easily managed by loosening the hexagon cap nut and pulling out the driven shaft. The driven shaft is completely equipped with a locking screw and Rulon insert for the fitting of a glass stirrer with a shaft diameter of 10 mm.



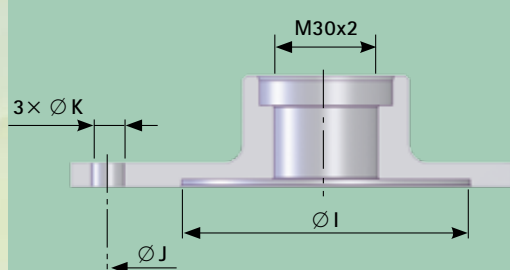
*redclair  
magnetic stirrer*







- A Cable connection for micro-motor
- B D.C. motor with casing
- C Diameter of red casing
- D Sealing edge underneath hexagon cap nut up to the upper edge of the pressure part
- E Hexagon cap nut up to the sealing edge under the flange
- F Stirrer shaft protrusion including locking screw
- G Diameter for fitting glass stirrer



| H   | I    | J   | K   |
|-----|------|-----|-----|
| 25* | 45.5 | 75  | Ø 9 |
| 25  | 64   | 98  | Ø 9 |
| 40  | 64   | 100 | Ø 9 |
| 50  | 79   | 110 | Ø 9 |

- H Inside diameter of glass neck NW...
- I Outside diameter of glass neck
- J Pitch circle diameter
- K Drilled hole diameter

All dimensional data in mm

\*Housing free of pressure

stirrer drive  
 mrk

---

## Material

---

- All components that come into contact with the medium are manufactured from stainless material WNo. 1.4435 (AISI 316L). If an aggressive medium is being used, only the stirrer shaft must be selected from a suitable material, such as Hastelloy C22, titanium, tantalum or Inconel types.

---

## Connection and seal

---

- The compact magnetic stirrer drive with its M30 × 2 mm connecting thread is mounted directly on the glass flange. It is sealed using an O-ring.
- In addition, you will find a radial shaft seal between the hexagon cap nut and the driven shaft, which prevents the medium penetrating to the internal parts.
- The flange seal sits perfectly, as all flanges have a depression on the underside and are also held with the hexagon cap nut.

---

## Operating pressure and temperature

---

- The operating range depends on the glass reactors, which provide a max. operating pressure of 10 bar and an operating temperature of 200°C.

---

## Drive, torque and bearings

---

- D.C. motor 60 Watt, 24V/DC. The drive is linked to the required DZA-6/24 control unit by means of a two-part cable arrangement. Connection to the control unit 1 and 220 V, 50 Hz. There is also a cable from the speed readout to the display unit.
- The torques provided by the magnetic coupling extend from 20–90 Ncm
- Corrosion-resistant ball bearings on the driven shaft for a maximum speed of 1300 rpm.

---

*delivery address*

---

*postal address*

---

*phone*

---

*fax*

---

*internet*

---

*e-mail*

---

*premex reactor ag*

---

*industriestrasse 11*

---

*postfach 444*

---

*ch-2543 lengnau/switzerland*

---

*+41 (0)32 653 60 20*

---

*+41 (0)32 653 60 25*

---

*www.premex-reactorag.ch*

---

*office@premex-reactorag.ch*

---



# mrk reosprint

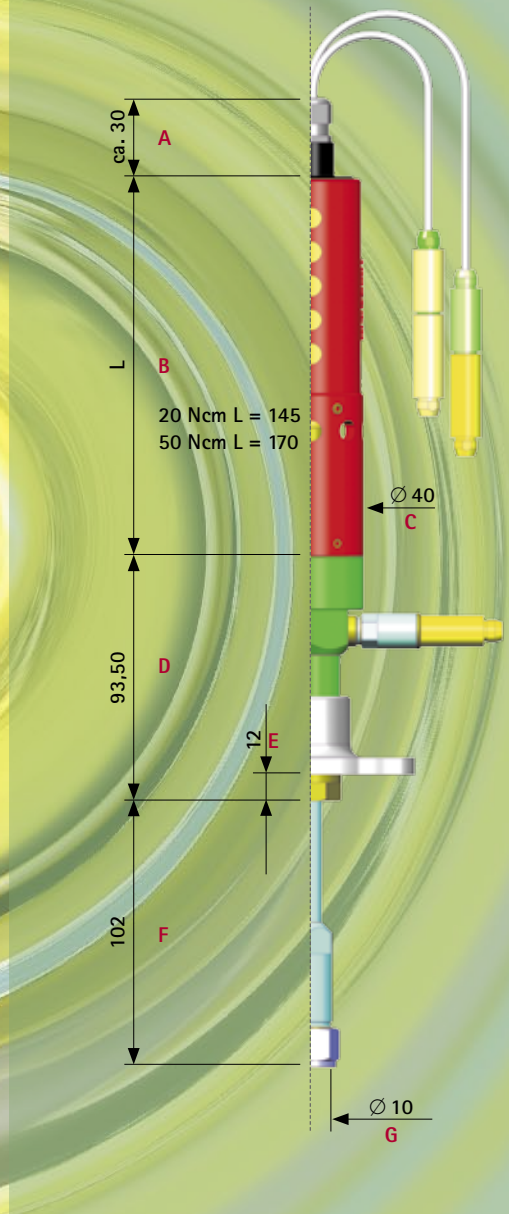
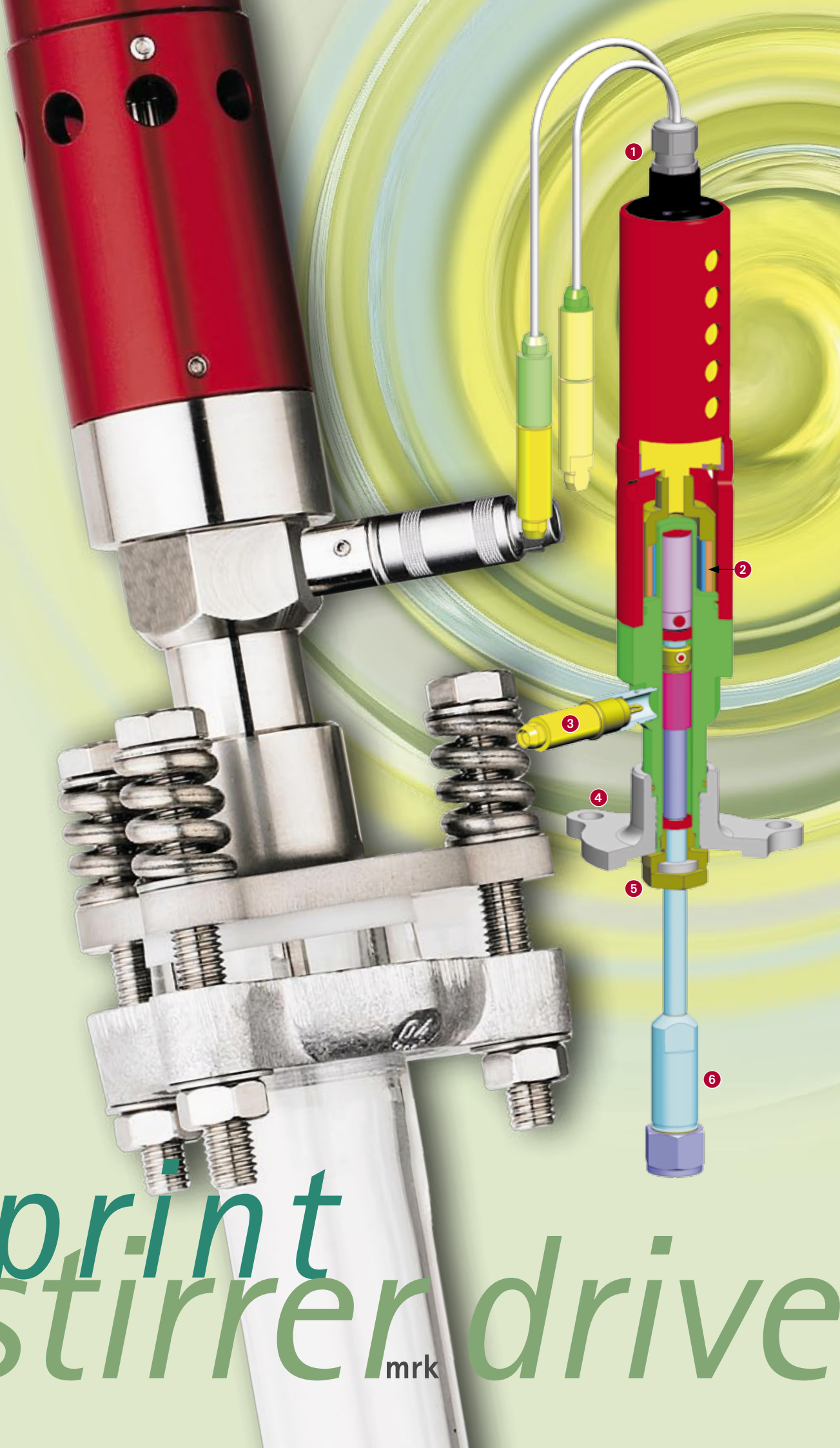




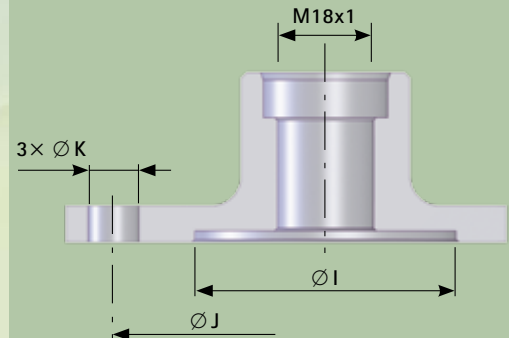
The family resemblance is unmistakable, but every version has its own special strength. The personal strength of the "redsprint" lies in its torque of 20 Ncm or 50 Ncm and a compact design.

Pure Passion in RED

- 1 The RED style has been developed further. We offer a 24 V D.C. motor with an almost silent running movement, controlled by the printed circuit board of the DZA-6/24 control unit. The speed of 0 – 1300 rpm can be clearly read off from the 4-digit display and the setting can be changed on the potentiometer.
- 2 Magnetic stirrer drives from premex reactor ag are the modern sealed stirrers. The encapsulated inner magnet is coupled to the outer magnet, and thereby takes up the driving force. Power ranges from 20–90 Ncm are available.
- 3 Every rotation that is registered by the pulse generator and transferred via the reed contact flows continuously to the DZA-6/24 for evaluation. The actual rotary speed is shown on the LED display.
- 4 The "redsprint" magnetic stirrer drive not only has compact external dimensions, but also has an innovative flange concept. It has been unusually well thought-out down to the smallest detail.
  - The flange differs fundamentally between the model for non-pressurised operation and the model for up to 10 bar. We offer you the "redsprint" for both applications in NW 25.
  - All M18x1 mm pressure parts from the mini-series can be screwed onto both NW25 flanges.
- 5 We have played it safe with regard to the seals:
  - You will find a radial shaft seal between the hexagon cap nut and the driven shaft, which prevents the medium penetrating to the internal parts.
  - The flange seal is held perfectly in place by the turned area on the underside of the flange and through clamping by the hexagon cap nut.
- 6 The driven shaft is completely fitted with locking screw and Rulon insert. Various glass stirrers with shaft diameters of 10 mm can be attached.



- A Cable connection for micro-motor
- B D.C. motor with casing
- C Diameter of red casing
- D Sealing edge underneath hexagon cap nut up to the upper edge of the pressure vessel
- E Hexagon cap nut up to the sealing edge under the flange
- F Stirrer shaft protrusion including locking screw
- G Diameter for fitting glass stirrer



| H   | I    | J  | K   |
|-----|------|----|-----|
| 25* | 45.5 | 75 | Ø 9 |
| 25  | 64   | 98 | Ø 9 |

- H Inside diameter of glass neck NW...
  - I Outside diameter of glass neck
  - J Pitch circle diameter
  - K Drilled hole diameter
- All dimensional data in mm
- \*Housing free of pressure

# redsprint magnetic stirrer drive

mrk



---

## Material

---

- Our seal concept prevents medium penetrating into the inner area of the magnetic stirrer. In the case of aggressive media, it is therefore only necessary to manufacture the stirrer shaft from resistant material such as Hastelloy C22, titanium, tantalum etc. Most components are manufactured from WNo. 1.4435 (AISI 316L).

---

## Connection and seal

---

- Installing the pressure vessel onto the flange is easy to carry out with the M18x1 mm threaded connection. It is sealed using an O-ring
- Reliability is provided by a radial shaft seal between the hexagon cap nut and the driven shaft.
- The flange seal must be mentioned as the third factor, which acts as a seal from the glass piston to the metal flange and as a centring element for the glass cylinder.

---

## Operating pressure and temperature

---

- Two types of flange are basically available, the NW25 for the non-pressurised area and the NW25 designed for a glass reactor up to 10 bar. We limit the operating temperature at 200°C.

---

## Drive, torque and bearings

---

- D.C. motor 60 Watt, 24V/DC. The drive is linked to the required DZA-6/24 control unit by means of a two-part cable arrangement. Connection to the control unit 1 and 220 V, 50 Hz. There is also a cable from the speed readout to the display unit.
- The torques provided by the magnetic coupling are either 20 Ncm or 50 Ncm. Corrosion-resistant ball bearings on the driven shaft achieve a maximum speed of 1300 rpm.

---

*delivery address*

---

*postal address*

---

*phone*

---

*fax*

---

*internet*

---

*e-mail*

---

---

*premex reactor ag*

---

*industriestrasse 11*

---

*postfach 444*

---

*ch-2543 lengnau/switzerland*

---

*+41 (0)32 653 60 20*

---

*+41 (0)32 653 60 25*

---

*www.premex-reactorag.ch*

---

*office@premex-reactorag.ch*

---



#### Anschluss und Abdichtung

- Die Serie «isodrive» lässt sich mit einem Anflanschring leicht auf einen Reaktordeckel montieren. Die Anschlussmasse differieren zwischen den Ausführungen mit Kugellager oder Gleitlagerung.
- Gedichtet wird Metall auf Metall
- Wellenlänge (Mass X) wird individuell nach Deckeldicke des Reaktors angepasst.

#### Material

- Alle medienberührten Teile sind aus Edelstahl WNr. 1.4435 (AISI 316L) für einen Druck von 300 bar und WNr. 1.4980 (AISI 660) für den Bereich von 700 bar gefertigt. Hastelloy, Titan, Monel etc. auf Anfrage.

#### Drehzahlabnahme

- Eine Drehzahlabnahme an der Abtriebswelle ist serienmässig vorhanden. Die optimale Ergänzung bildet unser digitales Drehzahlanzeige-Gerät Typ DZA-2B, um die U/Min. laufend zu überwachen.
- Regelgeräte ausgerüstet mit digitaler Drehzahlanzeige, Frequenzumformer und Potentiometer sind ebenfalls erhältlich.

#### Lagerung

- Für rostfreie Ausführungen sind Kugellager an der Abtriebswelle vorgesehen. Hastelloy oder Titan-Magnetrührantriebe werden mit Gleitlagerung ausgerüstet. Auf Anfrage sind Keramiklager lieferbar.

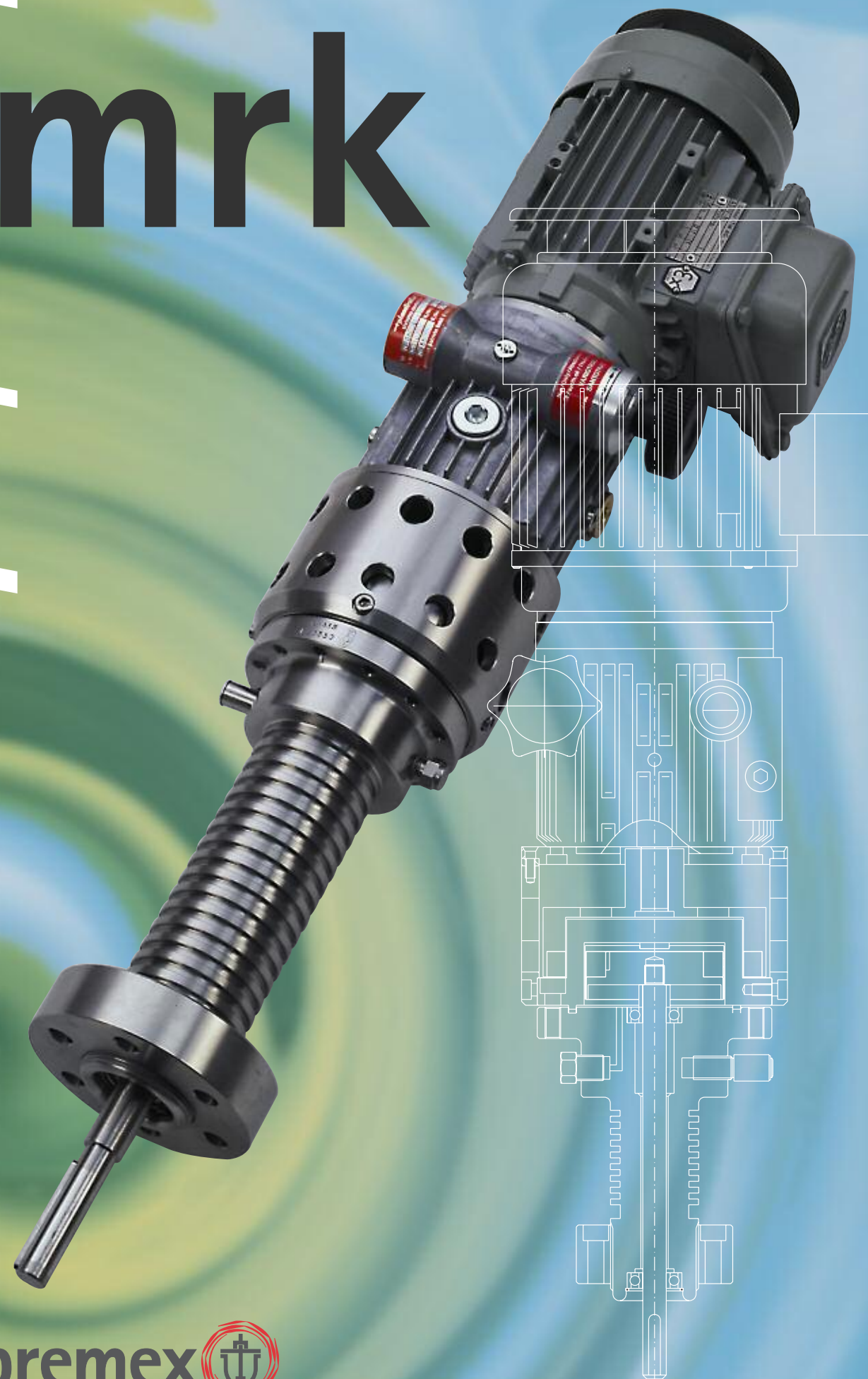
#### Antriebe in Variationen

- Zwei Antriebstypen sind grundsätzlich erhältlich. Angeboten wird ein Drehstrommotor, angesteuert über Frequenzumformer oder ein Kugelrollgetriebe «Planet-rol» in serienmässiger Ex-Ausführung. Bei Variante .1 wird die Abtriebsdrehzahl über ein Potentiometer am Regelgerät eingestellt von 200–1'200 U/Min. (oder andere Drehzahlen wählbar). Ausführung .2 dagegen ist manuell stufenlos regulierbar. Erhältlich sind dabei Motoren mit einer Abtriebsdrehzahl von 0–550 U/Min. oder 0–1'150 U/Min.
- Anschluss 3 × 240/400 V, 50 Hz.

phone  
fax  
internet  
e-mail

premex reactor ag  
industriestrasse 11  
ch-2543 lengnau/switzerland  
+41 (0)32 653 60 20  
+41 (0)32 653 60 25  
www.premex-reactorag.ch  
office@premex-reactorag.ch

# isodrive

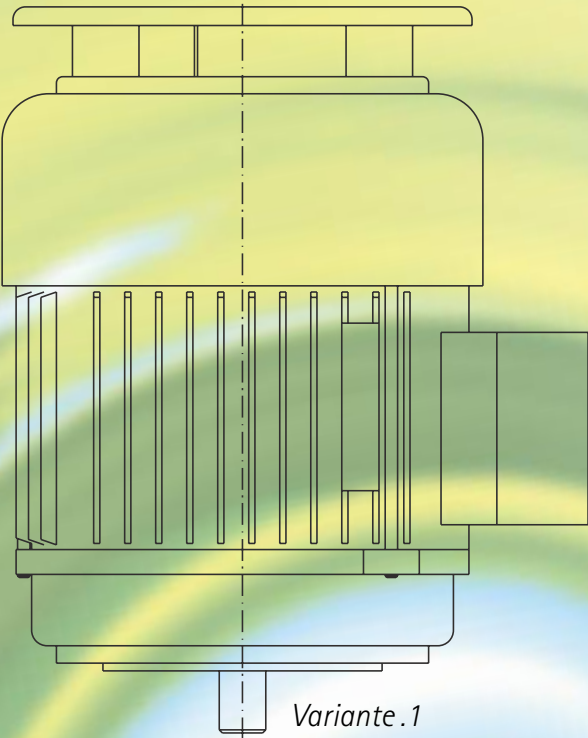


premex  
reactor ag®

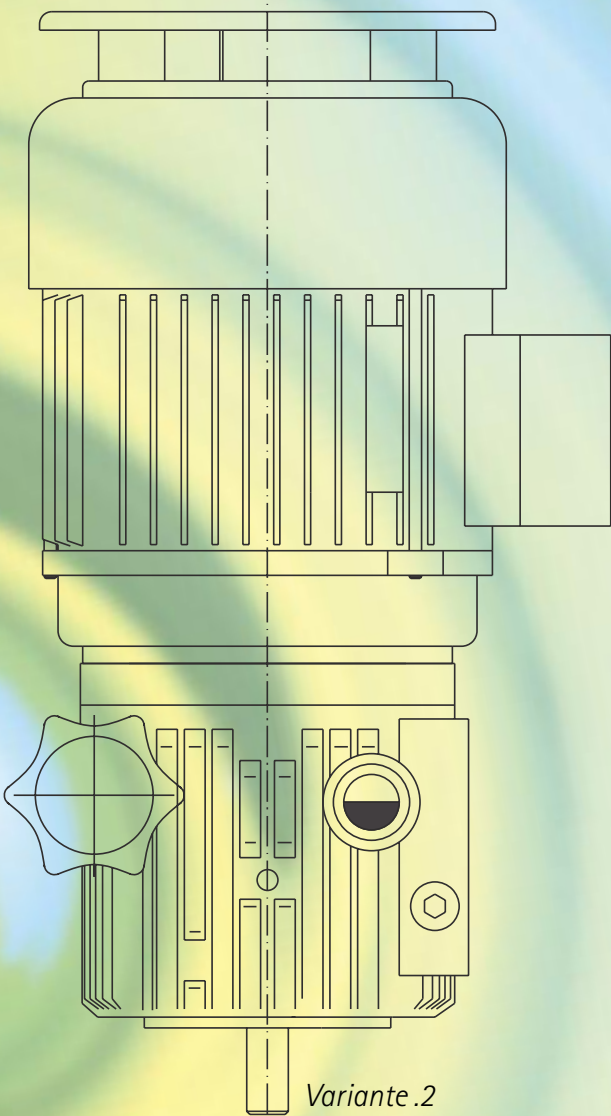


Magnetrührantriebe der Serie mrk 50–55 «isodrive»  
überzeugen durch ihre leistungsoptimierte, kompakte  
Bauform und die starken Drehmomente von 2–8 Nm,  
erweiterbar bis 4 Nm.

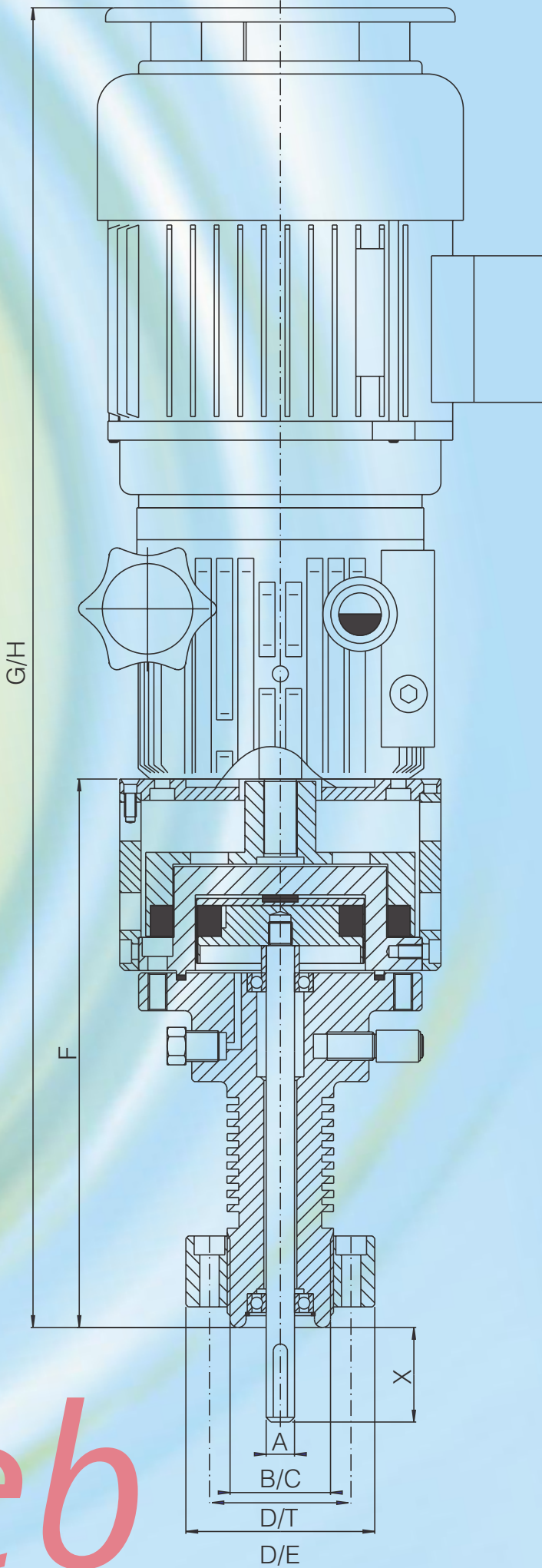
|                           |              |              |              |              |              |              |               |               |               |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Artikel Nr.               | 07.467.00004 | 07.467.00006 | 07.467.00008 | 07.467.00010 | 07.467.00012 | 07.467.00014 | 07.467.00016  | 07.467.00018  | 07.467.00020  |
| Typ/Variante              | mrk 50.1     | mrk 51.1     | mrk 52.1     | mrk 53.1     | mrk 54.1     | mrk 55.1     | mrk 50.1 HC22 | mrk 52.1 HC22 | mrk 54.1 HC22 |
| Artikel Nr.               | 07.467.00005 | 07.467.00007 | 07.467.00009 | 07.467.00011 | 07.467.00013 | 07.467.00015 | 07.467.00017  | 07.467.00019  | 07.467.00021  |
| Typ/Variante              | mrk 50.2     | mrk 51.2     | mrk 52.2     | mrk 53.2     | mrk 54.2     | mrk 55.2     | mrk 50.2 HC22 | mrk 52.2 HC22 | mrk 54.2 HC22 |
| M Nm                      | 2            | 2            | 5            | 5            | 8            | 8            | 2             | 5             | 8             |
| Mat. WNr.                 | 1.4435       | 1.4980       | 1.4435       | 1.4980       | 1.4435       | 1.4980       | 2.4602        | 2.4602        | 2.4602        |
| AISI                      | 316 L        | 660          | 316 L        | 660          | 316 L        | 660          | HC22          | HC22          | HC22          |
| p bar                     | 200          | 700          | 200          | 700          | 200          | 700          | 350           | 350           | 350           |
| T °C                      | 300          | 300          | 300          | 300          | 300          | 300          | 300           | 300           | 300           |
| P1 kW                     | 0.25         | 0.25         | 0.37         | 0.37         | 1.1          | 1.1          | 0.25          | 0.37          | 1.1           |
| A mm ø                    | 12           | 12           | 20           | 20           | 20           | 20           | 12            | 20            | 20            |
| B/C mm ø                  | M45x1,5      | M45x1,5      | M60x2        | M60x2        | M60x2        | M60x2        | M45x1,5       | M60x2         | M60x2         |
| Kugellager/<br>Gleitlager |              |              |              |              |              |              |               |               |               |
| D/E mm ø                  | 80           | 80           | 120          | 120          | 120          | 120          | 80            | 120           | 120           |
| Kugellager<br>Gleitlager  |              |              |              |              |              |              |               |               |               |
| Teilkreis DT              | 60           | 60           | 90           | 90           | 90           | 90           | 60            | 90            | 90            |
| Anz. Schraub.             | 8xM10        | 8xM10        | 8xM12        | 8xM12        | 8xM12        | 8xM12        | 8xM10         | 8xM12         | 8xM12         |
| F mm                      | 232          | 232          | 344          | 344          | 357          | 357          | 232           | 344           | 357           |
| G mm                      |              |              |              |              |              |              |               |               |               |
| Drehstrom                 | 462          | 462          | 574          | 574          | 587          | 587          | 462           | 574           | 587           |
| H mm                      |              |              |              |              |              |              |               |               |               |
| Planetroll                | 597          | 597          | 709          | 709          | 857          | 857          | 597           | 709           | 857           |



Variante .1



Variante .2



isodrive  
magnetrührantrieb

mrk



#### Anschluss und Abdichtung

- Die Serie «isodrive» lässt sich mit einem Anflanschring leicht auf einen Reaktordeckel montieren. Die Anschlussmasse differieren zwischen den Ausführungen mit Kugellager oder Gleitlagerung.
- Gedichtet wird Metall auf Metall
- Wellenlänge (Mass X) wird individuell nach Deckeldicke des Reaktors angepasst.

#### Material

- Alle mediumberührten Teile sind aus Edelstahl WNr. 1.4435 (AISI 316L) für einen Druck von 300 bar und WNr. 1.4980 (AISI 660) für den Bereich von 700 bar gefertigt. Hastelloy, Titan, Monel etc. auf Anfrage.

#### Drehzahlabnahme

- Eine Drehzahlabnahme an der Abtriebswelle ist serienmässig vorhanden. Die optimale Ergänzung bildet unser digitales Drehzahlanzeige-Gerät Typ DZA-2B, um die U/Min. laufend zu überwachen.
- Regelgeräte ausgerüstet mit digitaler Drehzahlanzeige, Frequenzumformer und Potentiometer sind ebenfalls erhältlich.

#### Lagerung

- Für rostfreie Ausführungen sind Kugellager an der Abtriebswelle vorgesehen. Hastelloy oder Titan-Magnetührantriebe werden mit Gleitlagerung ausgerüstet. Auf Anfrage sind Keramiklager lieferbar.

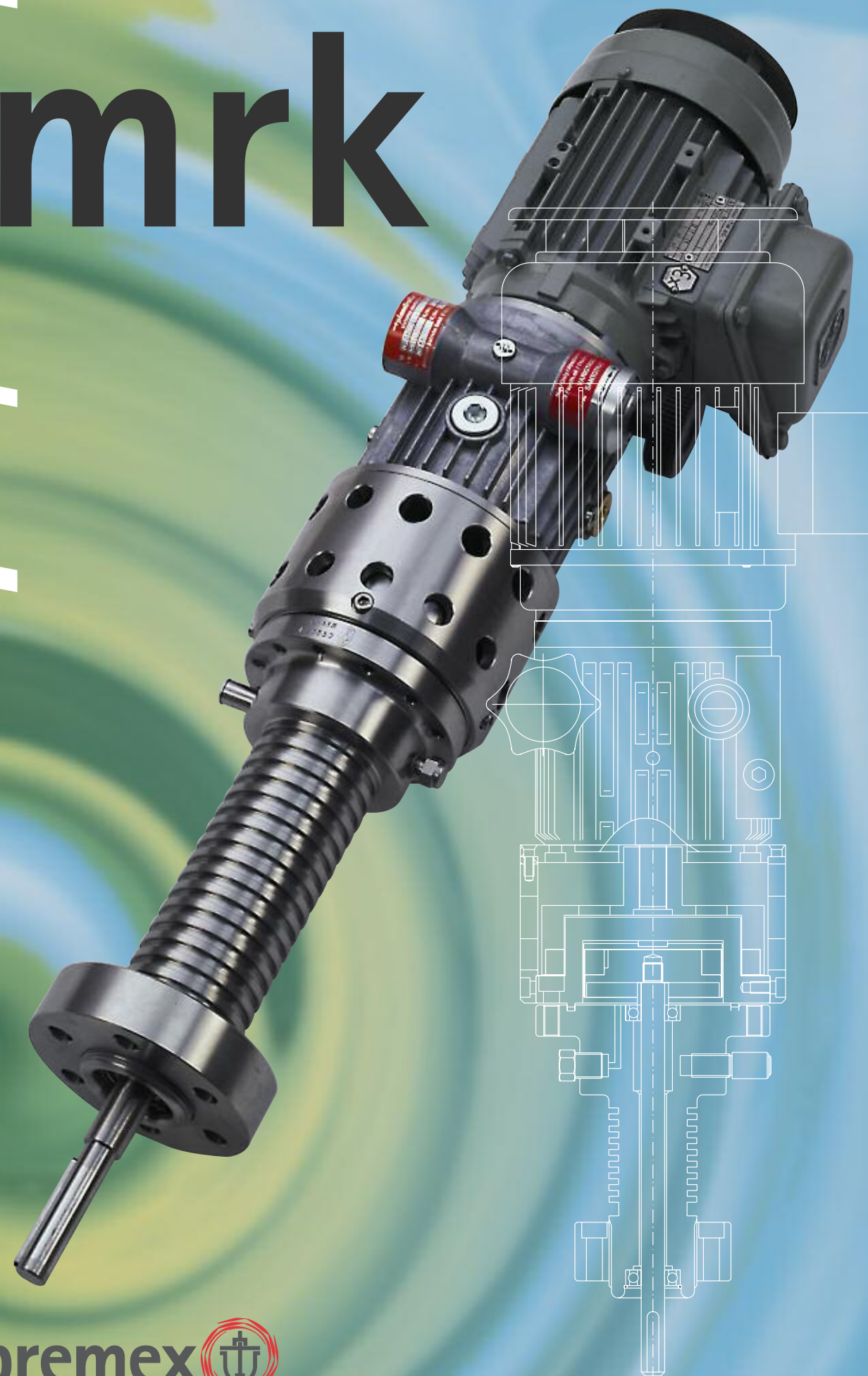
#### Antriebe in Variationen

- Zwei Antriebstypen sind grundsätzlich erhältlich. Angeboten wird ein Drehstrommotor, angesteuert über Frequenzumformer oder ein Kugelrollgetriebe «Planet-rol» in serienmässiger Ex-Ausführung. Bei Variante .1 wird die Abtriebsdrehzahl über ein Potentiometer am Regelgerät eingestellt von 200–1'200 U/Min. (oder andere Drehzahlen wählbar). Ausführung .2 dagegen ist manuell stufenlos regulierbar. Erhältlich sind dabei Motoren mit einer Abtriebsdrehzahl von 0–550 U/Min. oder 0–1'150 U/Min.
- Anschluss 3 × 240/400 V, 50 Hz.

phone  
fax  
internet  
e-mail

premex reactor ag  
industriestrasse 11  
ch-2543 lengnau/switzerland  
+41 (0)32 653 60 20  
+41 (0)32 653 60 25  
www.premex-reactorag.ch  
office@premex-reactorag.ch

# isodrive

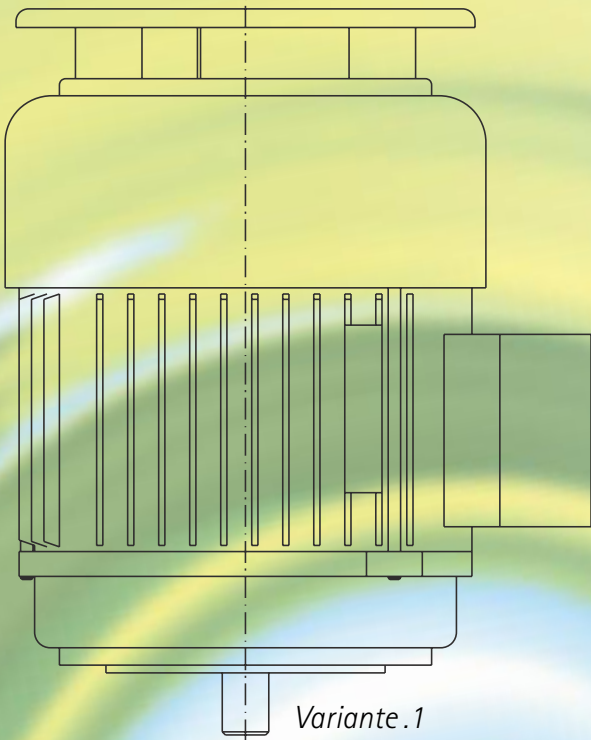


premex  
reactor ag®

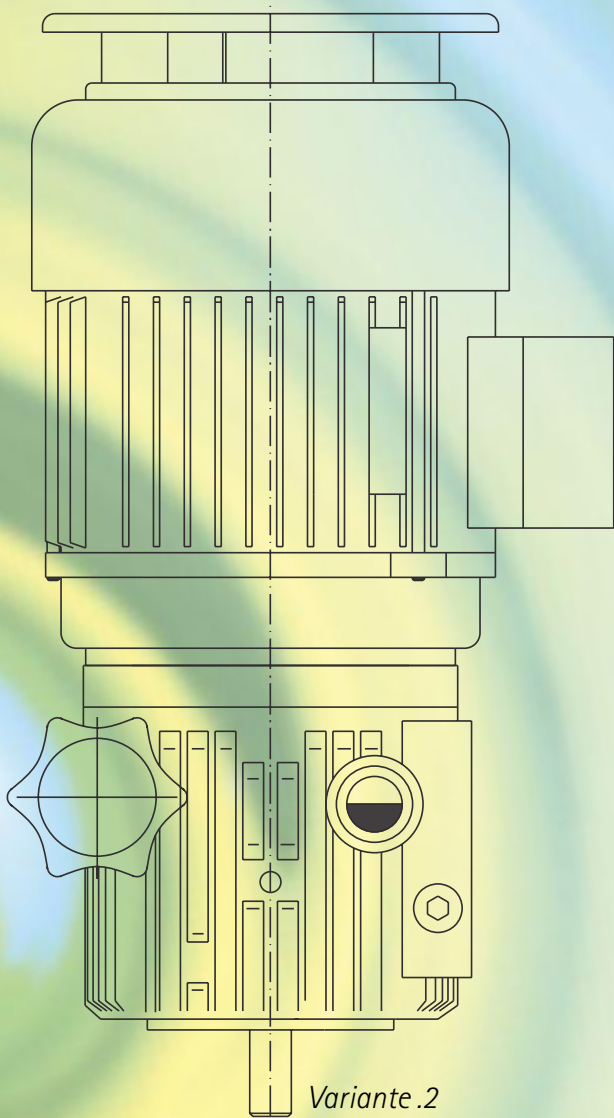


Magnetrührantriebe der Serie mrk 50–55 «isodrive» überzeugen durch ihre leistungsoptimierte, kompakte Bauform und die starken Drehmomente von 2–8 Nm, erweiterbar bis 4 Nm.

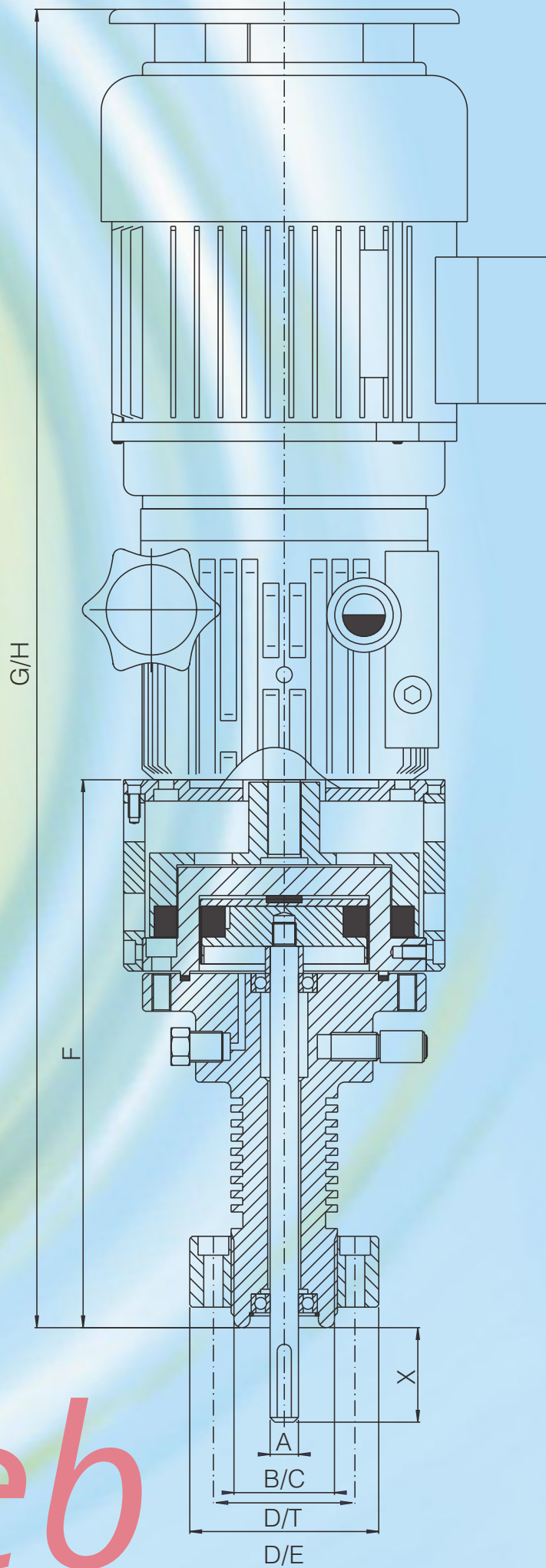
|                           |              |              |              |              |              |              |               |               |               |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Artikel Nr.               | 07.467.00004 | 07.467.00006 | 07.467.00008 | 07.467.00010 | 07.467.00012 | 07.467.00014 | 07.467.00016  | 07.467.00018  | 07.467.00020  |
| Typ/Variante              | mrk 50.1     | mrk 51.1     | mrk 52.1     | mrk 53.1     | mrk 54.1     | mrk 55.1     | mrk 50.1 HC22 | mrk 52.1 HC22 | mrk 54.1 HC22 |
| Artikel Nr.               | 07.467.00005 | 07.467.00007 | 07.467.00009 | 07.467.00011 | 07.467.00013 | 07.467.00015 | 07.467.00017  | 07.467.00019  | 07.467.00021  |
| Typ/Variante              | mrk 50.2     | mrk 51.2     | mrk 52.2     | mrk 53.2     | mrk 54.2     | mrk 55.2     | mrk 50.2 HC22 | mrk 52.2 HC22 | mrk 54.2 HC22 |
| M Nm                      | 2            | 2            | 5            | 5            | 8            | 8            | 2             | 5             | 8             |
| Mat. WNr.                 | 1.4435       | 1.4980       | 1.4435       | 1.4980       | 1.4435       | 1.4980       | 2.4602        | 2.4602        | 2.4602        |
| AISI                      | 316 L        | 660          | 316 L        | 660          | 316 L        | 660          | HC22          | HC22          | HC22          |
| p bar                     | 200          | 700          | 200          | 700          | 200          | 700          | 350           | 350           | 350           |
| T °C                      | 300          | 300          | 300          | 300          | 300          | 300          | 300           | 300           | 300           |
| P1 kW                     | 0.25         | 0.25         | 0.37         | 0.37         | 1.1          | 1.1          | 0.25          | 0.37          | 1.1           |
| A mm ø                    | 12           | 12           | 20           | 20           | 20           | 20           | 12            | 20            | 20            |
| B/C mm ø                  | M45x1,5      | M45x1,5      | M60x2        | M60x2        | M60x2        | M60x2        | M45x1,5       | M60x2         | M60x2         |
| Kugellager/<br>Gleitlager |              |              |              |              |              |              |               |               |               |
| D/E mm ø                  | 80           | 80           | 120          | 120          | 120          | 120          | 80            | 120           | 120           |
| Kugellager<br>Gleitlager  |              |              |              |              |              |              |               |               |               |
| Teilkreis DT              | 60           | 60           | 90           | 90           | 90           | 90           | 60            | 90            | 90            |
| Anz. Schraub.             | 8xM10        | 8xM10        | 8xM12        | 8xM12        | 8xM12        | 8xM12        | 8xM10         | 8xM12         | 8xM12         |
| F mm                      | 232          | 232          | 344          | 344          | 357          | 357          | 232           | 344           | 357           |
| G mm                      |              |              |              |              |              |              |               |               |               |
| Drehstrom                 | 462          | 462          | 574          | 574          | 587          | 587          | 462           | 574           | 587           |
| H mm                      |              |              |              |              |              |              |               |               |               |
| Planetroll                | 597          | 597          | 709          | 709          | 857          | 857          | 597           | 709           | 857           |



Variante .1



Variante .2



isodrive  
magnetrührantrieb  
mrk