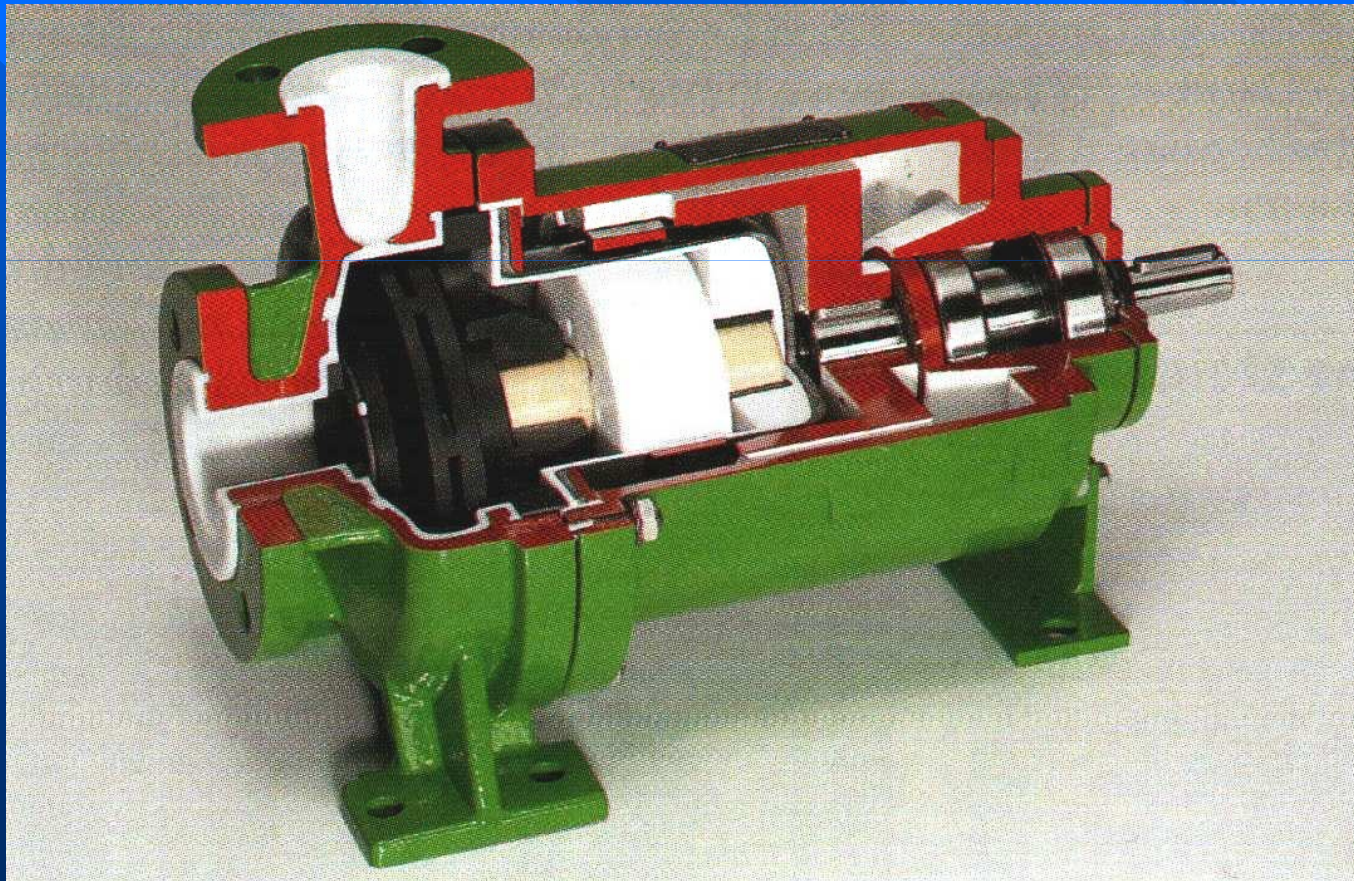


GEKO-Pumpen GmbH

... sealless for your safety,
for a better environmental!



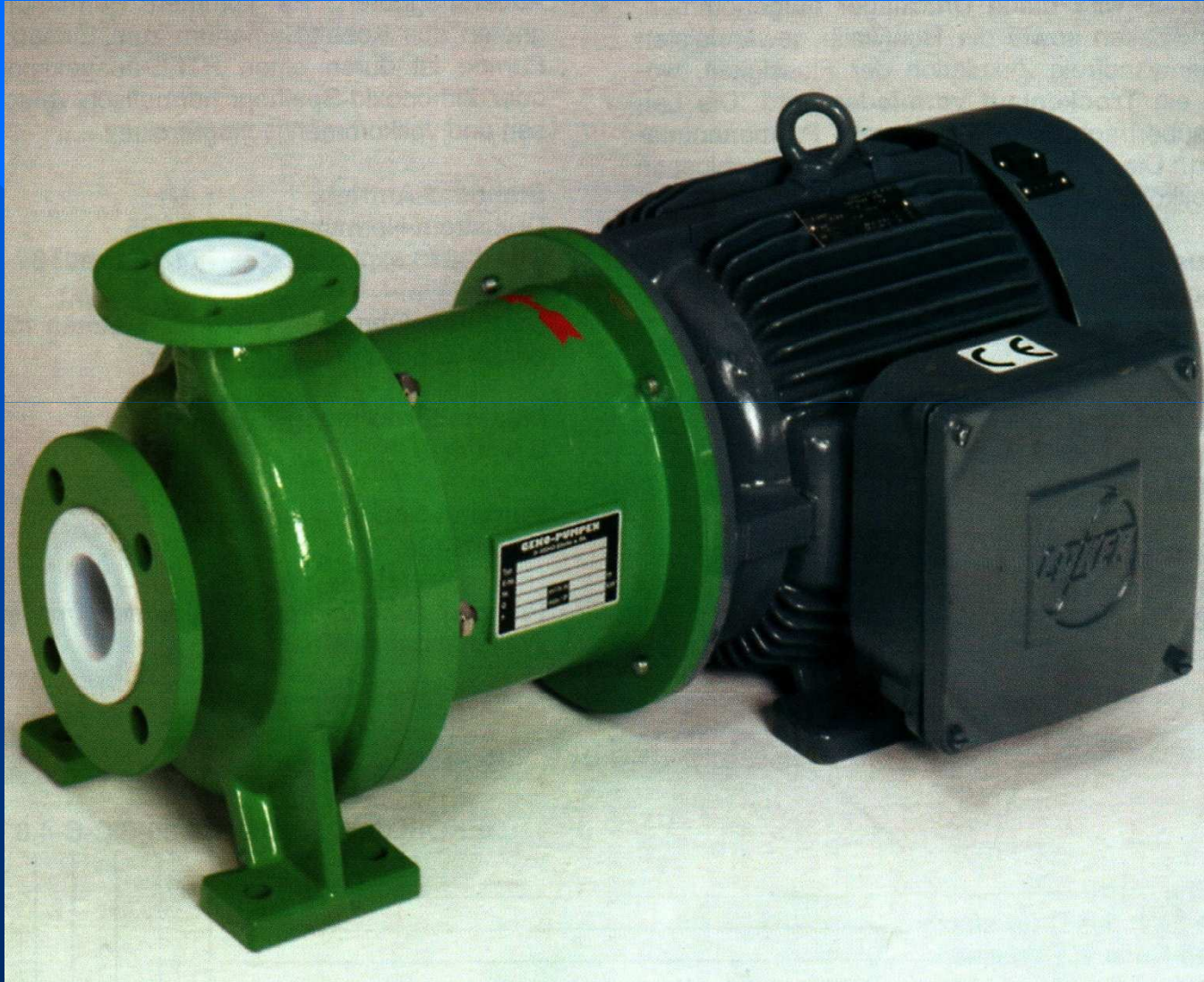
General

- **1983 company foundation under the name „GEKO-Pumpen Gesellschaft für korrosionsbeständige Pumpen mbH“.**
- **Founder of company: Mr. Dipl.-Ing. Heinz Langer with over 30 years experience in development of PTFE-lined pumps**
- **Based in: D-65343 Eltville a. Rh. (near Frankfurt)**
- **Topic of the company: Manufacturing, development and sales of PTFE-lined pumps with magnetic coupling.**

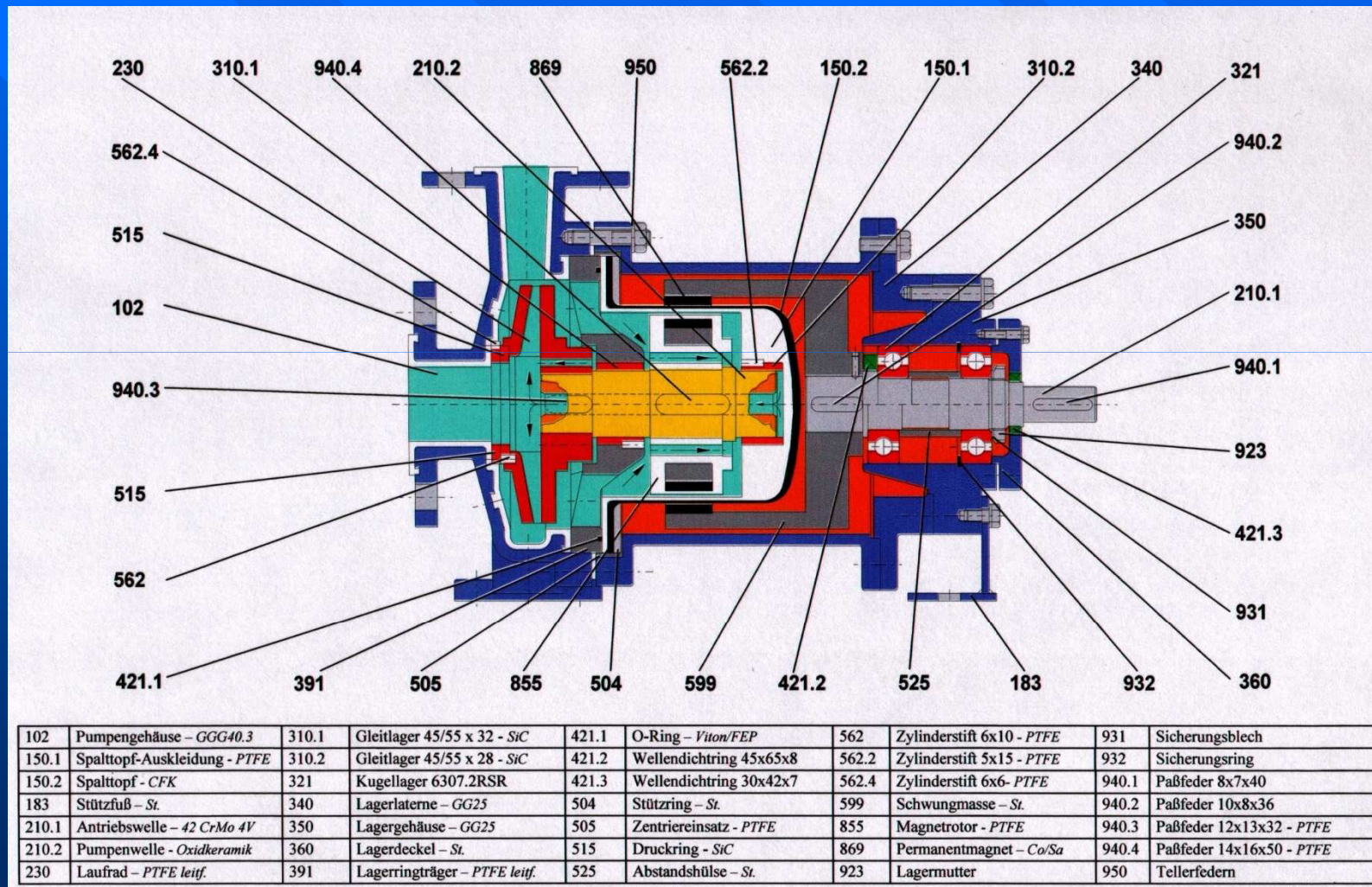
Product range

- Chemical magnetic pumps according to DIN EN 22858 Type NM oder Type BM
- Chemical magnetic pumps according to DIN EN 22858 with mechanical seal
Type N1 oder N2
- Chemical magnetic-peripheralpumps
Type PM oder Type BPM
- Chemical magnetic pumps in closed coupled design
Type BM („laboratory pumps“)

Picture NM/BM



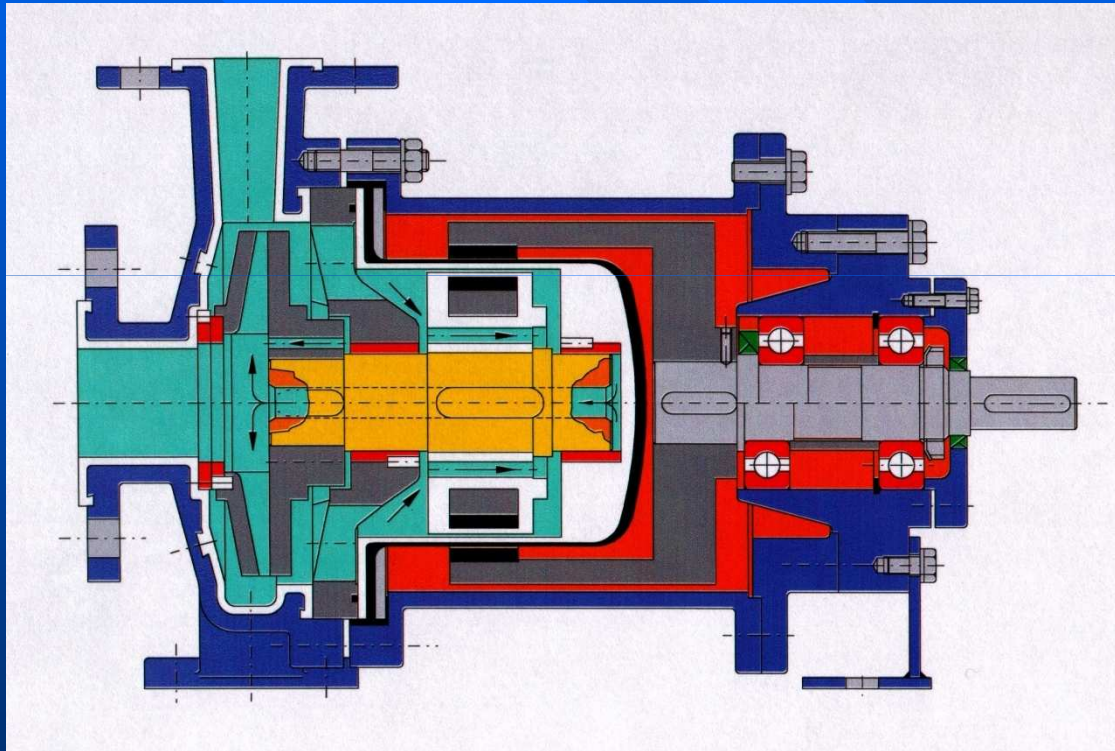
Basic version Type NM/BM



Technical datas NM/BM

- Capacity range: 0,5 – 180 m³/h
- Head: up to 90 m (at 50 Hz)
- Dimensions according to DIN EN 22858
- Temperature range: - 30° C to + 170° C
- Pressure stage: PN 16
- Pump sizes: 25-160, 32-160, 32-200, 40-200, 50-200, 50-250, 80-200

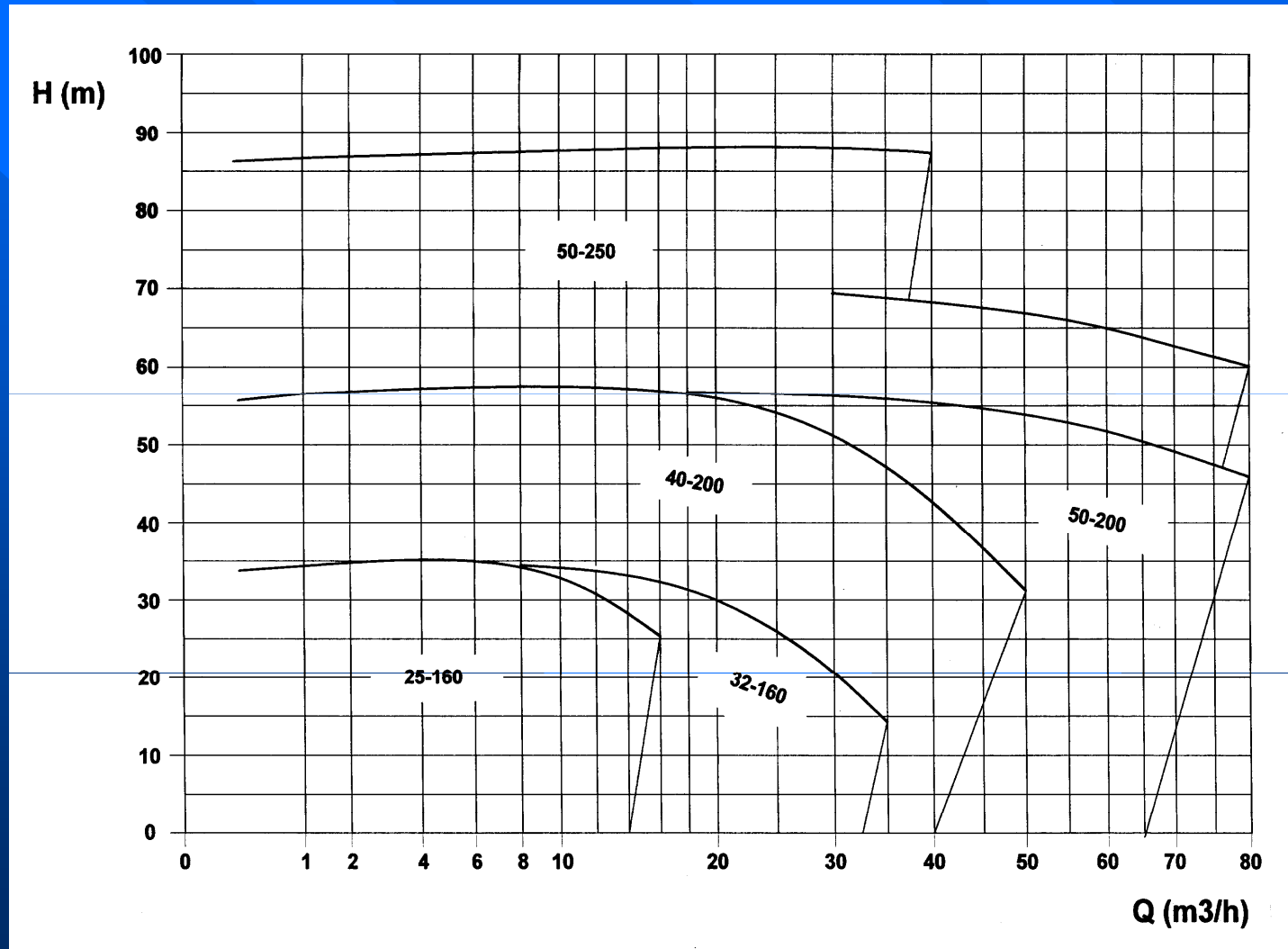
Pump concept Type NM/BM



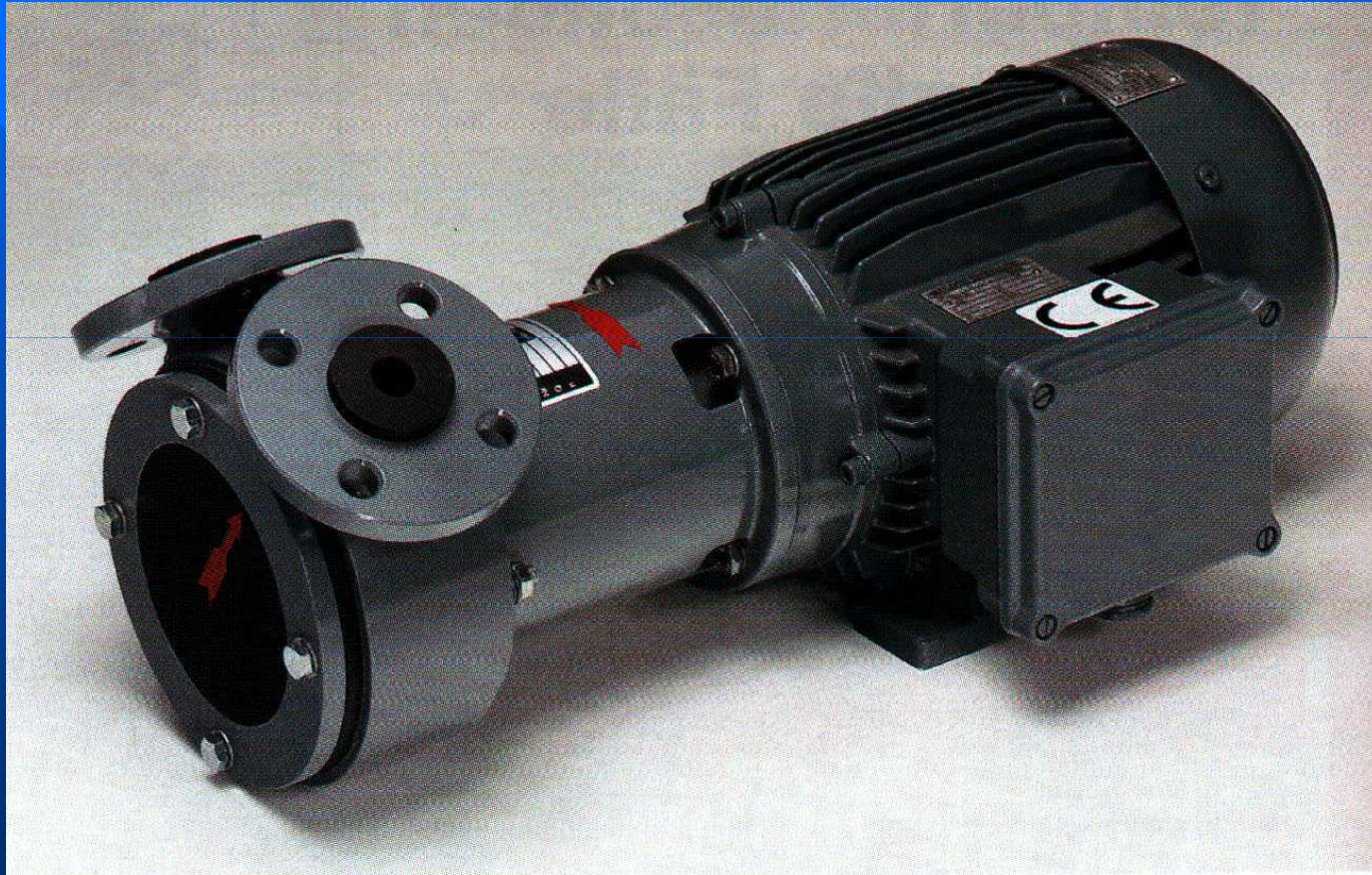
- Drilled ceramic shaft – for internal fluid circulation
- The thrust is absorbed by a thrust bearing
- Power transmission with PTFE keys
- Closed impellers with shovels
- Casing lining 4 mm made of PFA
- Carbon fiber isolation shell (free from metal) without power losses.

Curves Type NM/BM

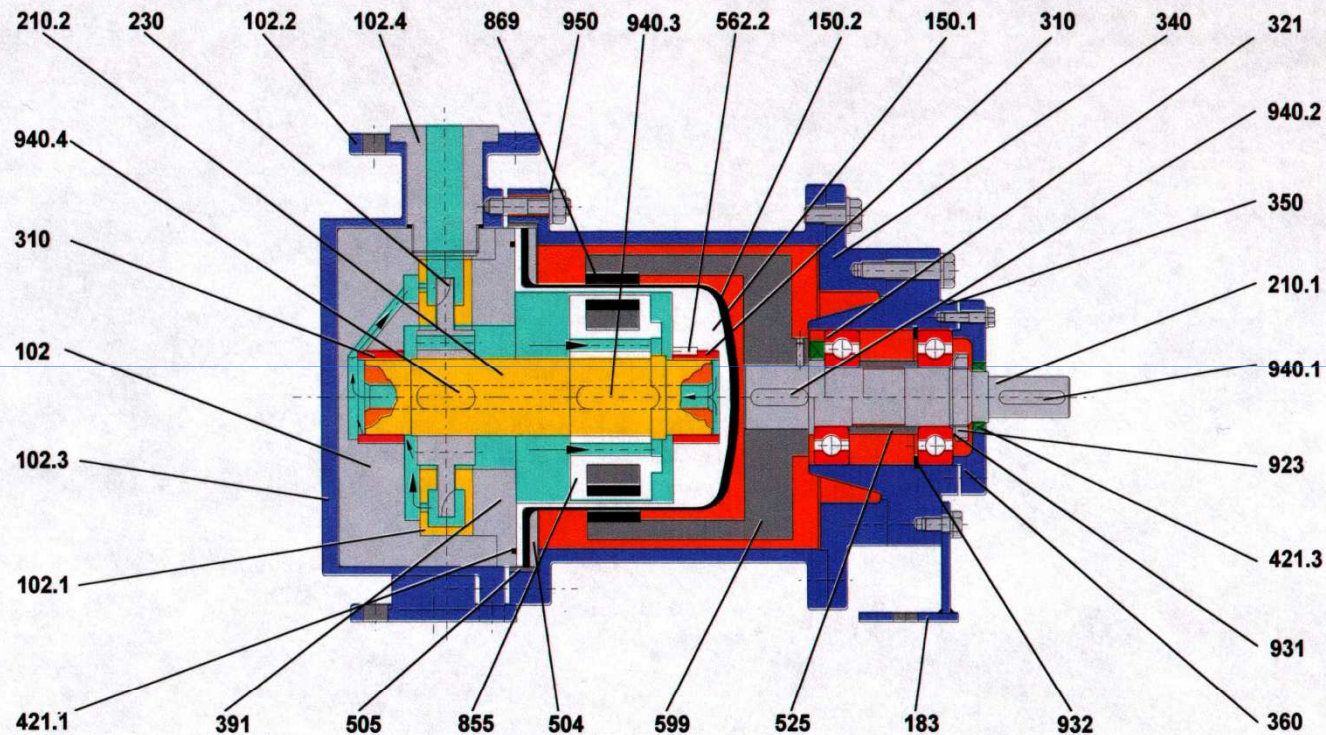
($n = 2900$ rpm., 50 Hz)



Picture Type 25-100 PM/BPM



Basic version Type PM/BPM

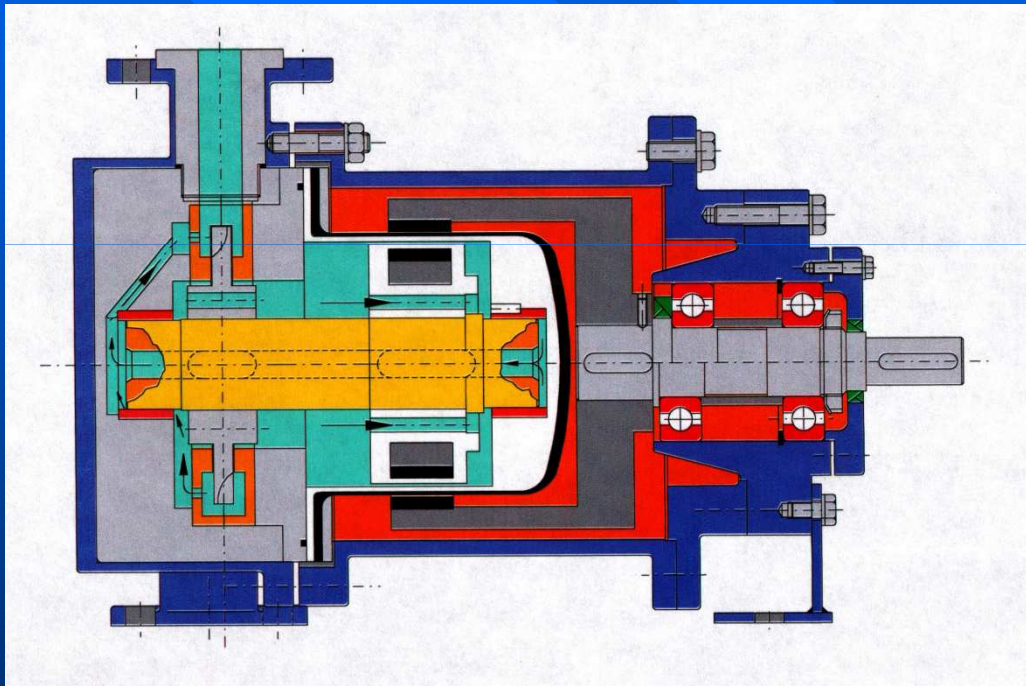


102	Gehäuse - PTFE leitf.	183	Stützfuß - St.	350	Lagergehäuse - St.	525	Abstandshülse - St.	932	Sicherungsring
102.1	Gehäuseeinsätze - Keramik	210.1	Antriebswelle - 42 CrMo 4V	360	Lagerdeckel - St.	562.2	Zylinderstift 5x15 - PTFE	940.1	Paßfeder 8x7x40
102.2	Gehäuseflansch - St.	210.2	Pumpenwelle - Oxidkeramik	391	Lagerringträger - PTFE leitf.	599	Schwungmasse - St.	940.2	Paßfeder 10x8x36
102.3	Stahlgehäuse - St.	230	Laufgrad - PTFE leitf.	421.1	O-Ring	855	Magnetrotor - PTFE	940.3	Paßfeder 14x16x50 - PTFE
102.4	Gehäusestutzen - PTFE	310	Gleitlager - SiC	421.3	Wellendichtring 30x42x7	869	Permanentmagnet - CoSa	940.4	Paßfeder 12x13x32 - PTFE
150.1	Spalttopfaußkleidung - PTFE	321	Kugellager 6307.2RSR	504	Stützring - St.	923	Lagermutter	950	Tellerfedern
150.2	Spalttopf - CFK	340	Lagerlaterne - GG 25	505	Zentriereinsatz - PTFE	931	Sicherungsblech		

Technical datas Type PM/BPM

- Capacity range: 0,05 – 16 m³/h
- Head: up to 90 m (at 50 Hz)
- Temperature range: - 30° C to + 150° C
- Pressure stage: PN 16
- Pump sizes: 15-90, 25-100, 25-140
- 2-Phases transport
- Fluids with up to 30% gas conveyable

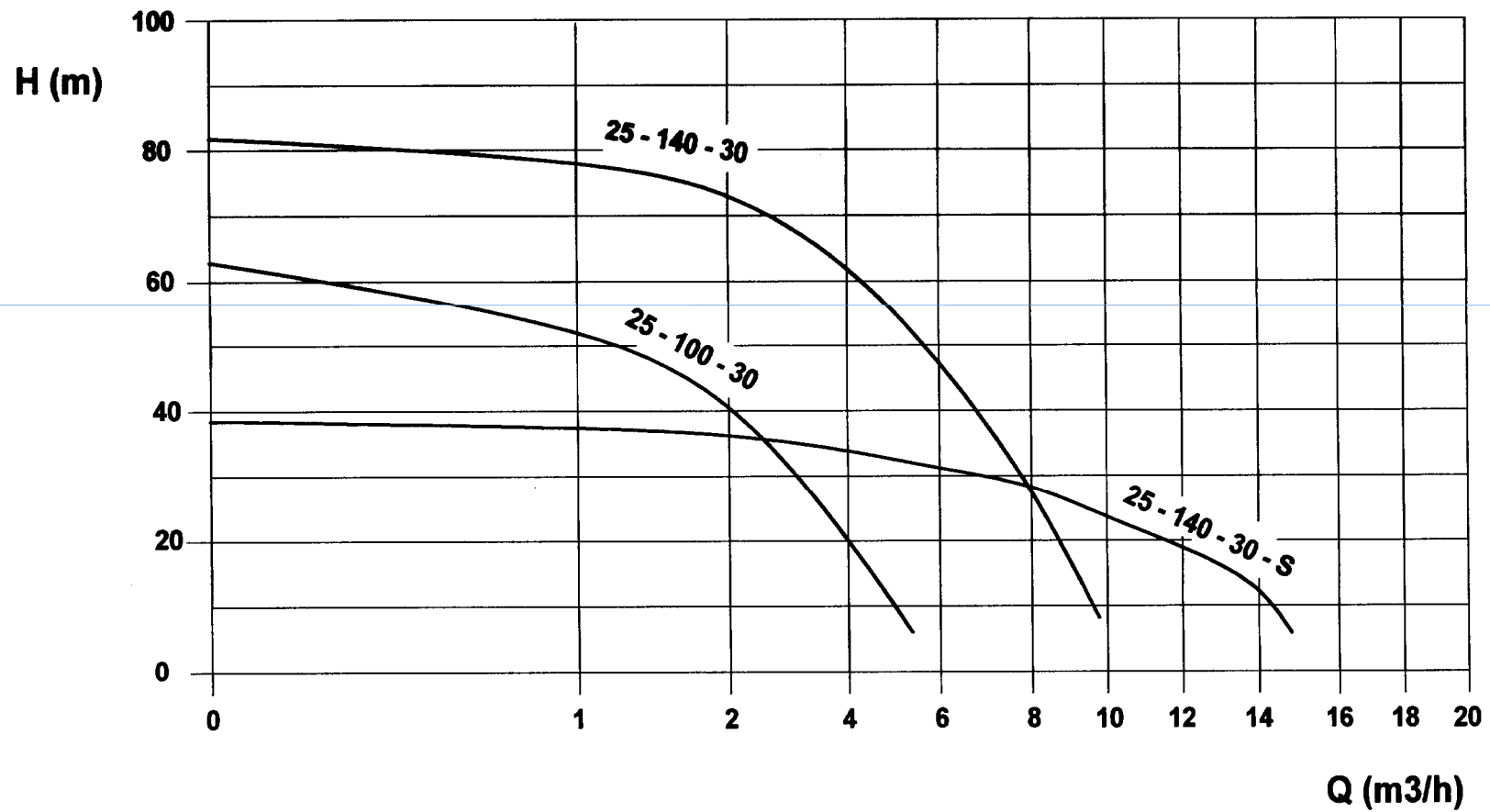
Pump concept Type PM/BPM



- Drilled ceramic shaft – for internal fluid circulation
- Casing inserts made by ceramic – uniquely defined gap distance
- Impeller mobile arranged on shaft
- Power transmission with PTFE keys

Curves Type PM/BPM

($n = 2900$ rpm., 50 Hz)



Chemical laboratory pump Type BM

- **Drives:** $n = 2900$ rpm. or $n = 4000$ rpm. (with gear)
- **Capacity range:** 0,1 m³/h to 9 m³/h
- **Head:** to 15 m
- **Temperature range:** up to 150° C
- **Pressure stage:** 16 bar

Special designs

- **Pumps for FDA-applications available**
- **Conductive lining available for all PTFE/PFA parts**
- **Additionally rotary shaft-sealing LM1**
- **Slide bearings with dry running safety coating**
- **Connection for PT 100**
- **Connection for external flushing**
- **Isolation shells made from zirconium are available**
- **Flanges bored as ANSI 150 lbs**

Transmission rates

(at 2900 rpm.)

- 15-70 : 0,55 kW (1,8 Nm)
- 15-90 : 1,35 kW (4,5 Nm)
- 20-100/25-100 : 2,8 kW (9,5 Nm)
- 25-140/25-160/32-160: 9,7 kW (32 Nm)
- 40-200 : 19,5 kW (64 Nm)
- 50-200 : 30 kW (100 Nm)
- 50-250/80-200 : 65 kW (215 Nm)]

Quality inspections

(include)

- **Test stand measurements with 5 measuring points**
(DIN 1944 III)
- **Torque**
- **Balance test (Q 6.3)**
- **Compression test (16 bar)**
- **Peak-to-peak swing**

Reference list

- Bayer AG (Saltigo, Lanxess)- Germany
 - InfracServ - Germany
 - Wacker Chemie – Germany
 - Merck – Germany
 - CABB - Germany
 - BASF AG - Germany
 - Aventis Sanofi - Germany
 - Degussa - Germany
 - Honeywell – Germany
 - Syngenta, Novartis, Ciba - Switzerland
 - Shell – France
 - Knoll, BASF – England
 - Kemira Chemicals – Finland
 - Ulsan Chemicals – Korea
 - Bayer Shanghai – China
 - Bayer, BASF – Belgium
- etc.

Potential customers

- Chemical industry
- Pharmaceutical industry
- Foodstuff industry
- Glass plants
- etc.

Chemical fluids

- Acetic acid
- Ammoniumfluorid
- Benzyle chloride
- Butanol
- Caustic soda solution
- Chlorbenzol
- Chlorine bleach solution
- Dichloromethane
- Hydrochloric acid
- Hydrofluoric acid
- Methanol
- Monochlorine acetic acid
- Nitric acid
- Phosphoric acid
- Sulfuric acid
- Toluol
- VE-water
- Waste water
- Xylene
- etc.