

ELECTRO HYDRAULICALLY DRIVEN
DOUBLE MEMBRANE PUMPS

- » 1.25 ltr / double stroke – 100 bar
- » 2.60 ltr / double stroke – 40 bar
- » 4.00 ltr / double stroke – 40 bar



PROMERA®
TECHNOLOGIEN FÜR FLUIDE



DOUBLE MEMBRANE TECHNOLOGY

SHEAR-FREE PUMPING FROM
LIQUID TO VISCOUS AND ABRASIVE FLUIDS

ELECTRO HYDRAULICALLY DRIVEN
DOUBLE MEMBRANE PUMPS

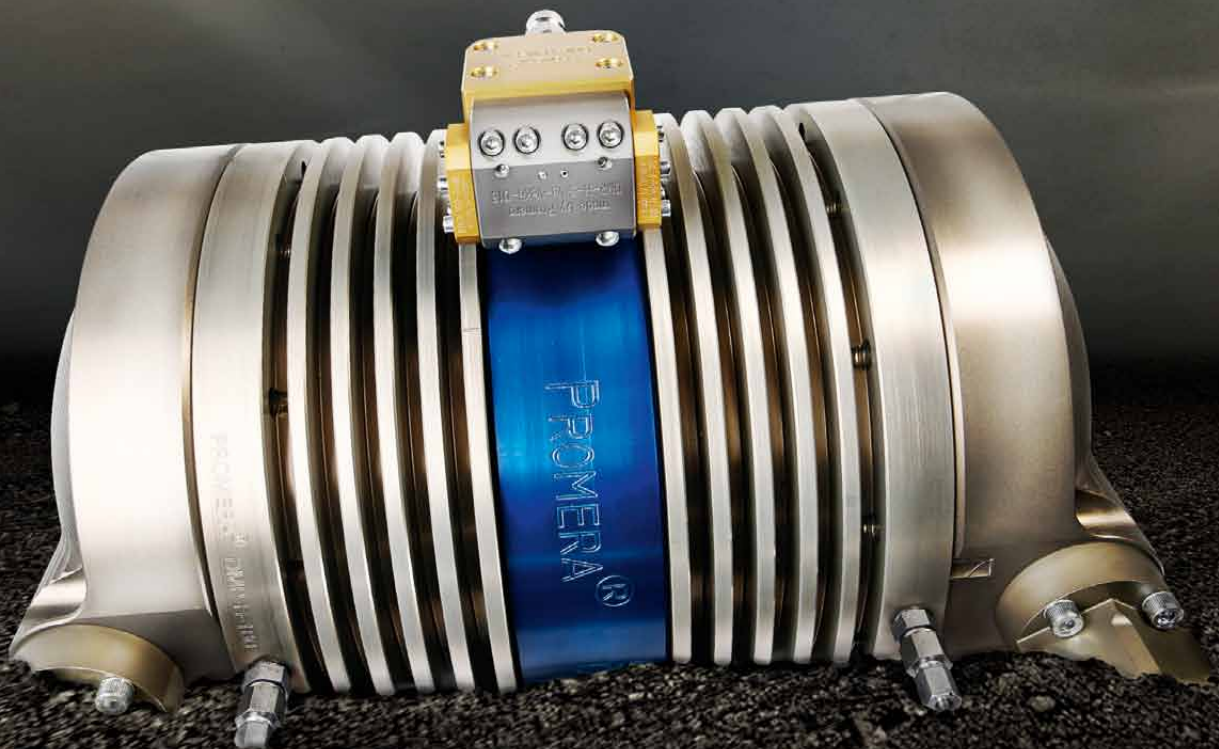
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MEMBRANE PUMPS TECHNOLOGY

SUCCESS THROUGH INNOVATIVE TECHNOLOGY

PROMERA BUILDS MEMBRANE PUMP SYSTEMS FOR INDUSTRIAL COMPANIES AND THEIR APPLICATIONS. OUR SUPERB QUALITY DOUBLE MEMBRANE TECHNOLOGY PUMPS YOUR FLUIDS NON-DESTRUCTIVELY AND EFFICIENTLY.

- YOU PROFIT FROM** » MINIMAL SHEAR STRESS » CONSISTENT MATERIAL QUALITY
» TROUBLE-FREE OPERATION » LONG LIFE » INCREASED PRODUCTIVITY
» LOWER PRODUCTION AND MAINTENANCE COSTS





FUNCTIONAL PRINCIPLE:

- » An electro hydraulic drive unit drives a piston system
- » The two double membranes (medium side made of PTFE) are coupled by means of a piston rod and moved by a hydraulic fluid with a minimal pressure differential load on the membranes of < 1 bar

- » The overflowing of hydraulic fluid into the conveyor medium is prevented by the use of double membranes with leakage control. A membrane burst is displayed

APPLICATION SECTORS:

- » Automotive industry » Automotive supplier industry
- » Plastics industry » Chemical industry
- » Rubber industry

APPLICATION RAW MATERIALS:

- » Solid and metallic coatings » UV-cured coatings
- » Liquid isocyanate » Silica sand filled polyurethane
- » Solvent-free and solvent-based adhesives

PATENTED DOUBLE MEMBRANE:



- » PTFE-coated membrane
- » Leakage ring
- » Hydraulic membrane

APPLICATION AREAS:

- » Paint supply systems » Material supply systems
- » Supply pumps for closed circuits
- » Supply pumps for batch operations

HYDRAULIC DRIVE:



- » Drive unit
- » Electric motor
- » Pressure cylinder & manometer

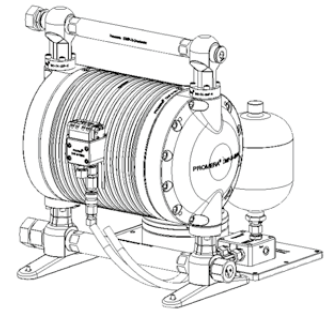
PROPERTIES:

- » Sparing, shear-free and non-destructive pumping of fluids
- » Stepless pressure control possible
- » Large pumping capacity per double stroke
- » No dynamically loaded seals in the fluid
- » Leak-free and low-pulsation pumping of fluids
- » In- and outlet valves with ceramic balls in ceramic design, all media-pumping parts are hard-coated and PTFE laminated, thereby enabling the pumping of abrasive and filled media
- » Reduced spare parts and inventory costs by using the same parts for the DMP-H pumps
- » No destruction, e.g. of metallic paints, due to membrane technology
- » Plug & Play: Easy installation only requires a 380 / 400 V 16 A 50 Hz (CEE 16A) connection
- » Patented double membrane guarantees maximum operational reliability

ELECTRO HYDRAULICALLY DRIVEN DOUBLE MEMBRANE PUMPS

SPECIFICATIONS

- » 3 DIFFERENT PRESSURE RATIOS AVAILABLE
- » PUMPING LOW VISCOUS TO VISCOUS MEDIA
- » VISCOSITY RANGE UP TO 10,000 mPas
- » PUMPING FLUIDS WITH CRITICAL EXTENDERS SUCH AS SILICA SAND, METALLIC PARTICLES, ETC.
- » EXTREMELY LOW SHEAR STRESSES ON THE FLUIDS
- » PUMPING ISOCYANATES AND UV-COATINGS



MODEL	1.2 ltr/DOUBLE STROKE	2.6 ltr/DOUBLE STROKE	4.0 ltr/DOUBLE STROKE
1. FLUID PUMPING SPECIFICATIONS			
Max. fluid outlet pressure	100 bar	40 bar	40 bar
Pumping capacity at 10 double strokes / min	12 ltr / min	26 ltr / min	40 ltr / min
Recommended double stroke rate	< 10 double strokes / min	< 10 double strokes / min	< 7 double strokes / min
Min. / max. fluid temperature	10 to 40°C	10 to 40°C	10 to 40°C
Max. fluid viscosity	10,000 mPas	10,000 mPas	10,000 mPas
Max. particle size	< 1mm	< 1mm	< 1mm
2. ENERGY SUPPLY			
Electrical connection	1.5 kW / 380 V EX II 3G	1.5 kW / 380 V EX II 3G	1.5 kW / 380 V EX II 3G or 3.0 kW / 380 V EX II 3G
3. NOISE EMISSIONS			
Acoustic pressure	< 55 dBA	< 55 dBA	< 55 dBA
4. CONNECTIONS			
Material inlet opening	G 1 ½ " a	G 1 ½ " a	G 1 ½ " a
Material outlet opening	G 1 " i	G 1 " i	G 1 " i
5. WEIGHT AND MASS			
Weight without fluids	150 kg	150 kg	150 kg
Dimensions in mm (W x D x H)	660 x 550 x 880	660 x 550 x 880	660 x 550 x 880

PROMERA
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