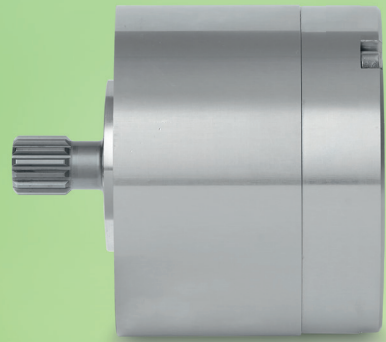


EIPQ0
EIPQ1
EIPQ2
EIPQ3
EIPQ5

Reversing pumps

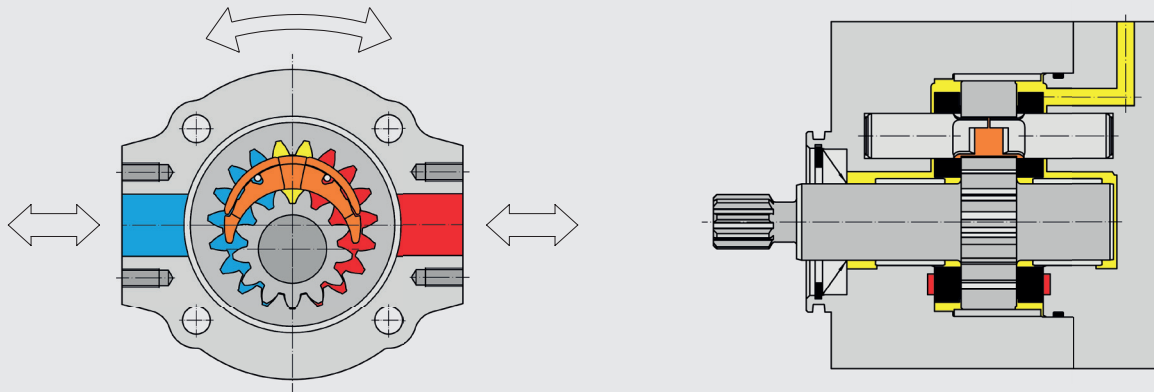


4-quadrant technology for highest efficiency

Internal gear pump

Typ EIPQ for 4-quadrant operation

EIPQ



Description

Eckerle internal gear pumps are gap-compensated and have been used in speed-controlled drives for decades. Due to the very good efficiency at low speeds and low viscosity and temperature dependence results in very good controllability over the entire operating range.

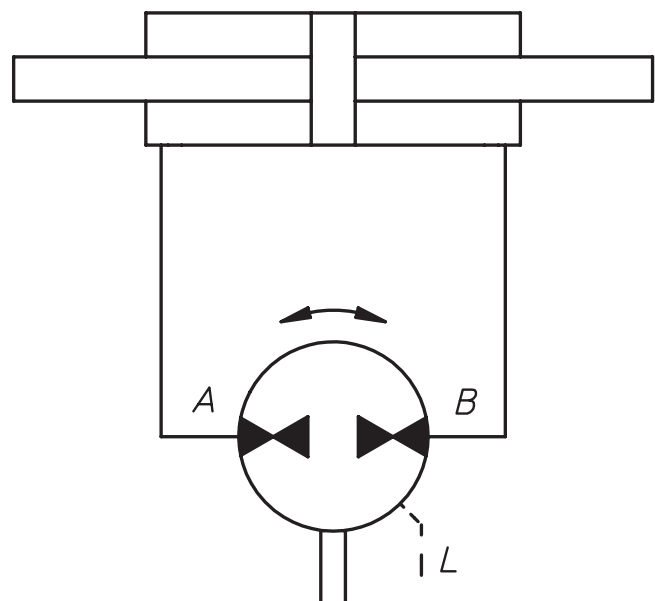
Due to their symmetrical design, the pumps of the EIPQ type can operate in both directions of rotation as a pump or as a motor. In addition, the inlet side can also be pressurized in pump mode. This results in very high potentials for energy savings.

Applications

- Bending machines
- Construction machinery
- Elevators
- Landing gear controls
- Industrial trucks
- Plastic injection machines
- Steering systems
- Presses

Since the different systems have very different requirements, the design of the EIPQ is adapted to the individual application. The basic design of the pump remains the same.

Which task can we solve for you?



Internal gear pump

Typ EIPQ for 4-quadrant operation

EIPQ

Advantages

- 4-quadrant operation
- High efficiency due to gap compensation
- Energy recovery
- Easy to integrate due to compact design
- Low noise operation
- Excellent controllability
- Long lifetime
- Highly dynamic due to low mass inertia
- Simultaneous pressurization at both port connections possible

Technical Data:

Series	EIPQ0		EIPQ1				EIPQ2					EIPQ3			EIPQ5	
Rated Size [NG]	060	100	016	020	025	032	005	006	008	011	013	016	020	025	032	040
Spec. volume V _{th} [cm ³ /rev]	0,6	1,0	1,6	2,0	2,6	3,2	5,4	6,4	7,8	10,8	13,3	15,8	20,0	24,5	32,7	40,2
Outer dimension in diameter without connections approx [mm]	40		66				100					120			150	
Continuous operating pressure [bar]**							250									
Peak operating pressure [bar] Max. 10 sec 15% duty cycle							280									
Cut-in pressure peak 100 ms [bar]**							300									
Nominal speed [min ⁻¹] self-sucking in open circle							100 – 3.000									
Max. speed [min ⁻¹] self-sucking in open circle							3.600									
Nominal speed [min ⁻¹] in closed circle with system pressure							100 – 5.000 (depending on system pressure)									
Max. speed [min ⁻¹] in closed circle with system pressure							6.000 (depending on system pressure)									
Operating viscosity [mm ² /s]							10 – 300									
Starting viscosity [mm ² /s]							2.000									
Operating medium							HL - HLP DIN 51 524 Teil 1/2									
Operating temperature [°C]							-20 bis +100									
Max. medium temperature [C°]							120									
Min. medium temperature [C°]							-40									
Max. ambient temperature [°C]							80									
Min. ambient temperature [°C]							-40									
Max. system pressure in closed circle [bar]							10									
Min. admission pressure [bar]							0,8 bar absolute (start 0,6)									
Degree of filtration							Class 20/18/15 due to ISO 4406									
Life expectancy							not less than 1 x 10 ⁶ load cycles against peak operating pressure									

The technical data are for guidance only.

* For permissible pressures at speeds from 100 to 1,800 rpm. Please consult us for higher speeds.



**For further information please visit:
eckerle.com**

All indicated data serve alone the product description and are not as characteristics in the legal sense to be understood. Subject to alterations.

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