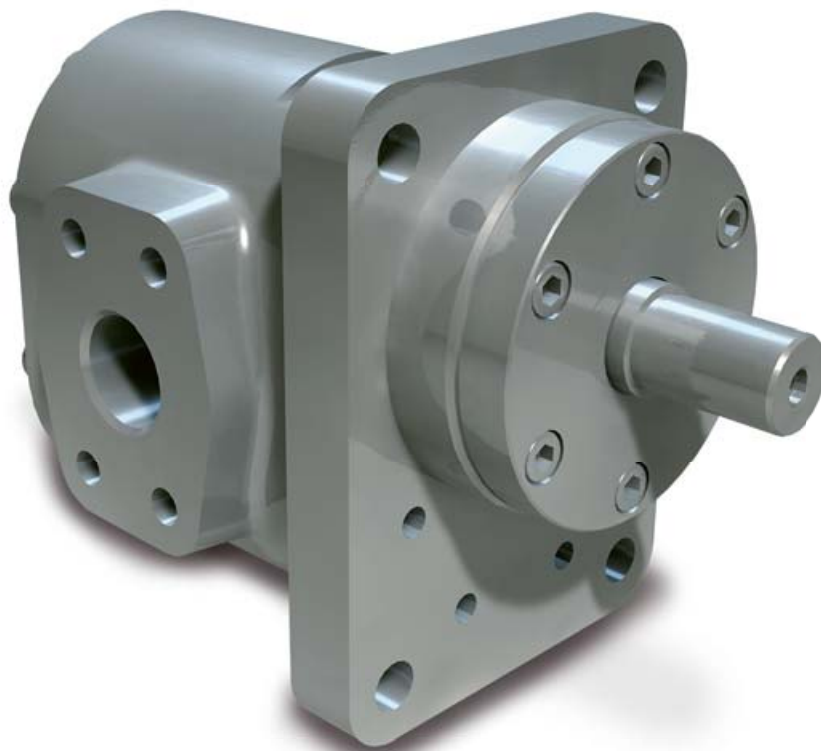


# hydrolub

## Grey cast iron gear pump for industrial processes



Continuously operated equipment calls for reliable components. Whether in lubrication oil applications or in processing plants, a pump is required to work inconspicuously yet reliably. Precisely the environment in which Maag tried and established gear pumps develop their full potential. Thanks to the extensive range of components and materials of construction to choose from, Maag gear pumps can be configured to suit customers' specific requirements and are therefore far superior to standard pumps in terms of performance and reliability.

### Your benefits

- Wide viscosity, temperature, and pressure range
- High efficiencies (due to tolerances and small clearances being modified in line with applications)
- Precise displacement volume
- Self-priming
- Reliability and longevity
- Safety
- Low pulsations for oil applications (helical gears)

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## A range of typical pumping media

- Silicones
- Paints and varnishes
- Waxes and paraffins
- Mineral oils and fats
- Fuels
- Petrochemical products
- Lube oil

## Certificates<sup>1)</sup>

- ATEX certificates
- 3.1 certificate
- German Air Quality certificate (TA-Luft)
- Performance test certificates

## Application limits:

<b>Viscosity:</b>	0.3 to 4,000,000 mPas
<b>Temperature:</b>	-30 to 150 °C
<b>Suction pressure:</b>	Vacuum to 65 bar
<b>Discharge pressure:</b>	Vacuum to 120 bar
<b>Flow rate<sup>2)</sup>:</b>	0.1 to 1,750 l/min

## Options

- Heated seals
- Bi-directional rotation
- Special modifications for demanding applications

## Accessories

- Stands, motor flanges and base plates
- Product connecting flanges
- Couplings
- Motors and gear reducers
- Frequency converters
- Shaft seal systems

## Technical specifications:

<b>Housing:</b>	■ Pressure-resistant cast iron
<b>Gear shafts:</b>	■ Nitrided steel (spur, helical or coated)
<b>Bearing<sup>3)</sup>:</b>	■ Steel/bronze, Sintered iron, Synthetic carbon ■ Steel with carbon inserts ■ Nitrided steel and Nitrided steel coated ■ Hardened tool steel ■ Bronze - CuAl
<b>Shaft seal:</b>	■ Lip seals and packing ■ Single or double mechanical seal ■ External mechanical seal ■ Interlock or heater connections available ■ Magnetic coupling with single or double containment shell
<b>Connections:</b>	■ SAE, CETOP, DIN, and ANSI flanges

## Theoretical pumping capacities in l/min at 0 bar Δp:

Size	at 500 rpm	at 750 rpm	at 1,000 rpm	at 1,500 rpm	at 3,000 rpm
22/6	0,64	0,96	1,28	1,92	3,84
22/13	1,39	2,09	2,78	4,17	8,34
22/22	2,35	3,53	4,70	7,05	14,10
22/28	2,99	4,49	5,98	8,97	17,90
28/28	5,10	7,65	10,20	15,30	30,60
28/36	6,55	9,83	13,10	19,70	39,30
36/28	9,95	14,90	19,90	29,90	59,70
36/36	12,80	19,20	25,60	38,40	76,80
36/45	16,00	24,00	32,00	48,00	96,00
45/45	23,15	34,73	46,30	69,45	139,00
45/56	28,90	43,30	57,70	86,60	173,00
56/56	46,30	69,45	92,60	138,90	–
56/70	58,00	87,00	116,00	174,00	–
70/70	88,00	132,00	176,00	264,00	–
70/90	114,00	170,00	227,00	341,00	–
90/90	186,00	278,00	371,00	557,00	–
90/110	227,00	340,00	453,00	680,00	–
110/90	293,00	439,00	585,00	–	–
110/110	358,00	537,00	716,00	–	–
110/140	456,00	683,00	911,00	–	–
140/110	527,00	791,00	1.054,00	–	–
140/140	671,00	1.007,00	1.342,00	–	–
140/180	863,00	1.294,00	1.725,00	–	–
140/220	1.054,00	1.581,00	2.108,00	–	–

The limitation of use depends on the operating conditions. Please contact Maag for specific applications.

<sup>1)</sup> Other certificates and conformities upon request. <sup>2)</sup> Higher flow rates upon request. <sup>3)</sup> Other materials and designs available.