



## mag drive

Magnetic coupling for chemical and industrial processes



Magnetic drives are hermetically sealed thereby guaranteeing that environmentally hazardous, poisonous, and malodorous substances are pumped safely.

The product chamber in the gear pump is completely separated from the environment by a containment shell. The torque is transferred from motor shaft to pump shaft without contact by means of heavy-duty permanent magnets. This design makes the magnetic couplings extremely safe and virtually maintenance-free.

### Your benefits

- High suction pressures (standard to 25 bar, in special designs up to 100 bar)
- Hermetically-sealed design
- Optimized safety and leak sealing
- Long service life
- Virtually maintenance-free
- Low maintenance costs

## Application limits:

<b>Viscosity:</b>	1 to 5,000 mPas
<b>Temperature:</b>	-30 to 300 °C
<b>Suction pressure:</b>	<ul style="list-style-type: none"> <li>▪ Vacuum to 25 bar</li> <li>▪ Special designs up to 100 bar available</li> </ul>
<b>Discharge pressure:</b>	Vacuum to 100 bar

## Typical pumping media and their characteristics

- Toxic: hydrochloric acids, benzene, coolants, phenol, molten sulfur
- Malodorous: nitric acid, acids, anhydrides, fats, thermal oils, flavorings
- Volatile: solvents, condensates
- Combustible: solvents, nitrate, explosive substances, blasting oils, nitroglycerin
- Highly pure: pharmaceutical products
- Crystallize on contact with air: isocyanates

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

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

## Options

- Special designs for suction pressures up to 100 bar
- Temperature monitoring on containment shell
- Temperature, pressure or level monitoring of sealing liquid

## Technical data:

<b>Magnetic drive Type SMC (with a single containment shell):</b>	SMC 60-07	SMC 60-14	SMC 60-22	SMC 75-30	SMC 110-50	SMC 110-80	SMC 135-135
<b>Transferable torque in Nm:</b>	7	14	22	30	50	80	135
<b>Magnetic drive Type SMCD (with a dual containment shell):</b>	SMCD 60-07	SMCD 60-14	SMCD 60-22	SMCD 75-30	SMCD 75-40	SMCD 110-50	SMCD 135-180
<b>Transferable torque in Nm:</b>	7	14	22	30	40	110	180

Pump size	Theoretical pumping capacities in l/min at 0 bar dp				Motor flange ø [mm]	Magnetic drive sizes <sup>2)</sup>
	500	750	1,000	1,500		
<b>20/05</b>	0,48	0,72	0,96	1,44	200	SMC 60-07, SMCD 60-07
<b>22/06</b>	0,64	0,96	1,28	1,92	200	SMC 60-07, SMCD 60-07
<b>20/10</b>	0,96	1,44	1,92	2,88	200	SMC 60-07, SMCD 60-07
<b>22/13</b>	1,39	2,09	2,78	4,17	200 250	SMC 60-07, SMCD 60-07 SMC 60-14, SMCD 60-14
<b>20/20</b>	1,92	2,88	3,84	5,76	200	SMC 60-07, SMCD 60-07
<b>22/22</b>	2,35	3,53	4,7	7,05	200 250	SMC 60-07, SMCD 60-07 SMC 60-14, SMCD 60-14
<b>28/28</b>	5,1	7,65	10,2	15,3	250	SMC 60-14, SMC 60-22, SMCD 60-14, SMCD 60-22
<b>36/36</b>	12,8	19,2	25,6	38,4	250 300	SMC 60-22, SMCD 60-22 SMC 75-30, SMC 110-50, SMCD 75-30, SMCD 110-50
<b>45/45</b>	23,2	34,7	46,3	69,5	300 350	SMC 75-30, SMC 110-50, SMCD 75-30, SMCD 110-50 SMC 110-80, SMC 135-135
<b>56/56</b>	46,3	69,5	92,6	138,9	300 350	SMC 75-30, SMC 110-50, SMCD 75-30, SMCD 110-50 SMC 110-80
<b>70/70</b>	88	132	176	264	350	SMC 110-80, SMCD 110-50, SMCD 135-180

<sup>1)</sup> Other certificates and conformities upon request.

<sup>2)</sup> Other sizes upon request.

