

GEAR PUMPS

K series. The standard pressure balanced gear pump with front or lateral ports. Also available as a double pump with or without HI-LO circuit integrated within the pump itself.

G series. The lightweight, pressure balanced, low noise and high efficiency pump specifically designed for mini power packs.

H series. It features an oversized shaft and a higher number of teeth for high pressure applications and lower pressure pulsation, up to 280 bar peak.

VH series. The highest peak pressure external gear pump available on the market, up to 360 bar, with cast iron covers.

R*series. Bidirectional pumps with integrated suction check valves and two front outlet ports. Group 0 and 1. Choose SR / MR central manifold.

S series. Helicoidal gears for extremely low noise, low pulsations and high pressure.

Q & A

Why are pressure balanced gear pumps better than fixed clearance gear pumps used by many competitors?

Pressure balanced gear pumps are built with lateral pressure plates which reduce the mechanical clearance on the gears with the increase of the pressure on the outlet, thus greatly improving the volumetric efficiency, reducing energy consumption. This means more flow at high pressure without heat generation. The mechanical efficiency is kept at an optimal level too.

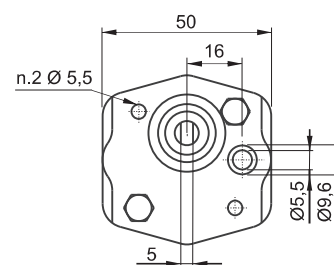
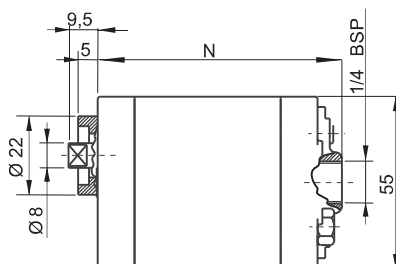
How can we mount both group 0 and group 1 pumps on the same Universal central manifold?

The group 1 pumps fit directly on the central manifold and are fixed by two bolts provided with the pump.
The group 0 pumps are fitted by the adaptor plate E60513025, which adapts the gr:0 pump front flange to the central manifold.

Why do the pump technical specifications show three maximum pressure levels?

Our pumps have three ratings for the maximum allowable pressure: 1-Peak: it can be allowed for maximum 2 seconds. 2-Intermittent: it can be applied on the pump for maximum 20 seconds; 3-Continuous: it can be applied to the pump at all times.

K TYPE GEAR PUMPS GROUP 0

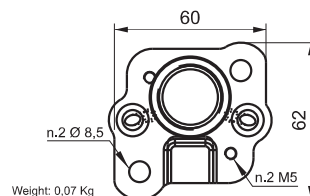


Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M5 8.8 class steel tightening torque: 8 ÷ 9,5 Nm
Pressure limits definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

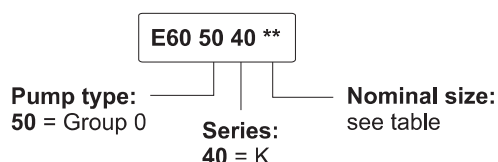
Aluminium adapter flange to use group 0 pump
on PPC, SPU, PPL and EPB group 1 manifold

Code: E60513025

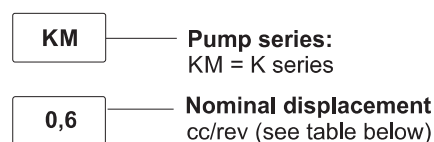


Standard rotation direction: clockwise rotation (from shaft side).
Counterclockwise rotation pumps can be mounted on request.
Ask our sales department.

Spare part code



PPM assembly code



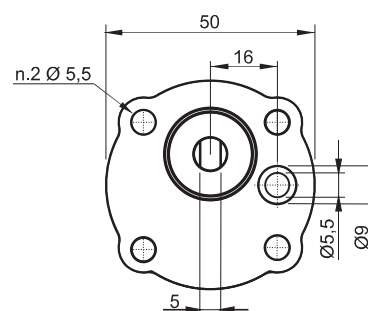
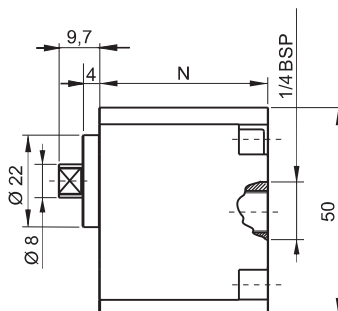
Available range

Nominal displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
0,26	200	180	160	6000	55	M5x65	E60504002	0,33
0,39	200	180	160	6000	57	M5x65	E60504004	0,35
0,64	200	180	160	6000	61	M5x65	E60504006	0,40
0,88	200	180	160	5000	62	M5x70	E60504009	0,44
1,25	200	180	160	3900	65	M5x70	E60504013	0,49
1,54	200	180	160	3900	67	M5x75	E60504015	0,51
1,91	160	140	120	3900	68	M5x80	E60504019	0,53

Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt length

H TYPE HIGH PRESSURE GEAR PUMPS, GROUP 0

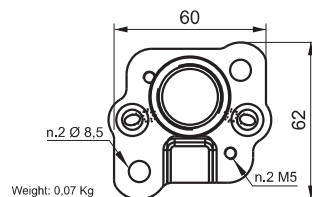


Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M5 8.8 class steel tightening torque: 8 ÷ 9,5 Nm
Pressure limits definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Standard rotation direction: clockwise rotation (from shaft side).
Counterclockwise rotation pumps can be mounted on request.
Ask our sales department.

Aluminium adapter flange to use group 0 pump
on PPC, SPU, PPL and EPB group 1 manifold
Code: E60513025



Weight: 0,07 Kg

Spare part code

E60 50 50 **		
Pump type: 50 = Group 0	Series: 50 = H	Nominal size: see spare part code on table

PPM assembly code

HM	Pump series: HM = H series
0,8	Nominal displacement cc/rev (see below table)

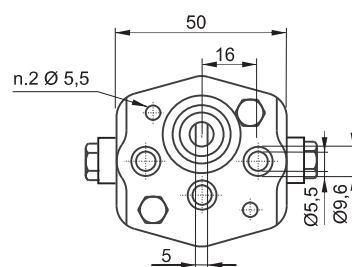
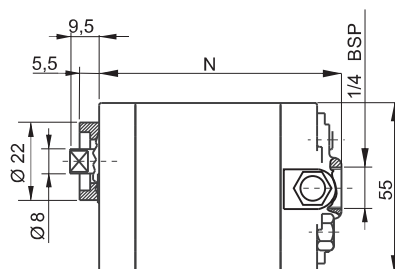
Available range

Nominal displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	Min Speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
0,2	280	270	250	7000	1800	36,4	5x50	E60505001	0,26
0,26	280	270	250	7000	1800	36,7	5x50	E60505002	0,27
0,38	280	270	250	7000	1500	37,8	5x50	E60505004	0,27
0,64	280	270	250	7000	1200	39,5	5x50	E60505006	0,28
0,8	280	270	250	7000	1000	40,7	5x50	E60505008	0,29
1,2	280	270	250	5000	900	43,4	5x55	E60505012	0,31
1,5	280	270	250	5000	700	45,0	5x55	E60505015	0,32

Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt length

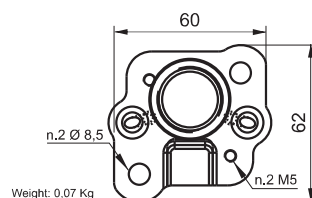
RKM TYPE BIDIRECTIONAL GEAR PUMPS, GROUP 0



Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M5 8.8 class steel tightening torque: 4,9 ÷ 5,9 Nm
Pressure limits definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Aluminium adapter flange to use group 0 pump
on PPC, SPU, PPL and EPB group 1 manifold
Code: E60513025



Spare part code

PCPAH *****

Nominal size:
see table

PPM assembly code

RKM

Pump type:
RKM = reversible K series

1,3

Nominal displacement:
cc/rev (see below table)

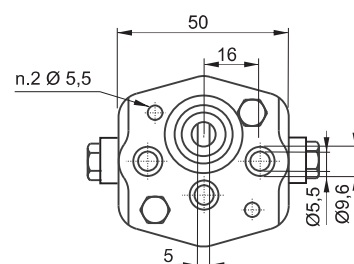
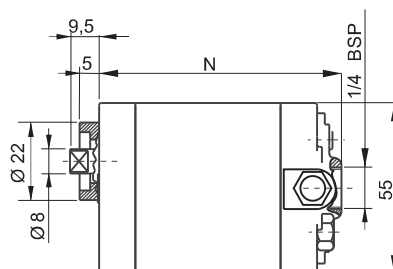
Available range

Nominal size	Nominal displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	Min speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
RKM0,2	0,26	190	170	150	7000	1000	68,5	M5x60	PCPAH00015	0,45
RKM0,3	0,32	190	170	150	7000	1000	69	M5x65	PCPAH00016	0,45
RKM0,4	0,38	190	170	150	7000	1000	69,5	M5x65	PCPAH00017	0,45
RKM0,5	0,50	190	170	150	7000	1000	70,5	M5x65	PCPAH00018	0,45
RKM0,7	0,65	190	170	150	7000	1000	71,5	M5x65	PCPAH00019	0,46
RKM0,9	0,88	190	170	150	6000	850	73,5	M5x70	PCPAH00020	0,48
RKM1,3	1,25	190	170	150	5000	700	76,5	M5x70	PCPAH00021	0,49
RKM1,5	1,5	190	170	150	4000	600	78,5	M5x75	PCPAH00022	0,53
RKM1,75	1,75	190	170	150	4000	600	80,5	M5x75	PCPAH00023	0,56
RKM2	2,0	190	170	150	3000	500	82,5	M5x75	PCPAH00024	0,58

Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt length

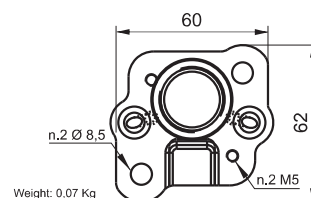
RGM TYPE BIDIRECTIONAL GEAR PUMPS, GROUP 0



Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M5 8.8 class steel tightening torque: 8 ÷ 9,5 Nm
Pressure limits definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Aluminium adapter flange to use group 0 pump
on PPC, SPU, PPL and EPB group 1 manifold
Code: E60513025



Weight: 0,07 Kg

Spare part code

E60 50 35 **	
Pump type: 50 = Group 0	Nominal size: see table
Series: 35 = R	

PPM assembly code

RGM	Pump type: RGM = reversible G series
1,3	Nominal displacement: cc/rev (see below table)

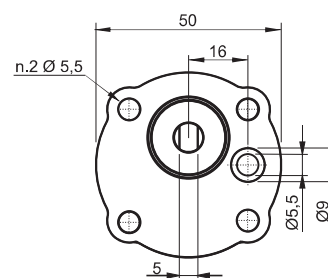
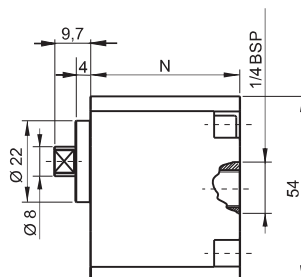
Available range

Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Code marked on pump	Spare part code	Weight [Kg]
RGM0,1	0,19	190	170	150	7000	61,5	M5x55	U0.25R18GVNKKX	E60503501	0,38
RGM0,2	0,26	190	170	150	7000	62,6	M5x55	U0.25R24GVNKKX	E60503502	0,39
RGM0,3	0,32	190	170	150	7000	63,5	M5x60	U0.25R30GVNKKX	E60503503	0,42
RGM0,4	0,38	190	170	150	7000	64,7	M5x60	U0.25R36GVNKKX	E60503504	0,43
RGM0,5	0,51	190	170	150	7000	66,6	M5x60	U0.25R48GVNKKX	E60503505	0,44
RGM0,7	0,64	190	170	150	7000	72,6	M5x65	U0.5R0,75GVNKKX	E60503506	0,46
RGM0,9	0,88	190	170	150	7000	73,6	M5x70	U0.5R1,00GVNKKX	E60503509	0,48
RGM1,3	1,25	190	170	150	5000	76,6	M5x70	U0.5R1,60GVNKKX	E60503513	0,49
RGM1,5	1,5	190	170	150	4000	78,6	M5x75	U0.5R2,00GVNKKX	E60503515	0,58

Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt length

SM SERIES HELICOIDAL GEAR SILENT PUMPS, GROUP 0

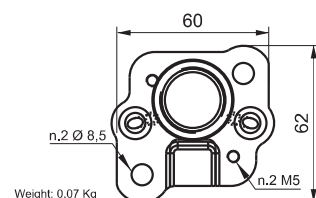


Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M5 8.8 class steel tightening torque: 8 ÷ 9,5 Nm
Pressure definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Standard rotation direction: clockwise (from shaft side).
Counterclockwise rotation pumps can be mounted on request.
Ask our sales department.

Aluminium adapter flange to use group 0 pump
on PPC, SPU, PPL and EPB group 1 manifold
Code: E60513025



Spare part code

PCPAH *****

Nominal size:
see table

Assembly code

SM

Series:
SM = Group 0 S series

0,3

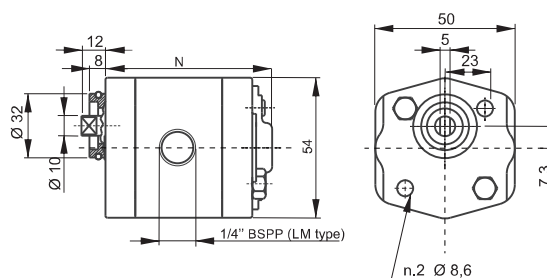
Size

Available range

Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Noise level [dba]**	Spare part code	Weight [Kg]
SM0,75	0,75	200	180	160	3500	59,8	M5x70	50	PCPAH00027	0,40
SM 1	1	200	180	160	3500	62	M5x70	50	PCPAH00028	0,44
SM1,25	1,25	200	180	160	3000	64,2	M5x75	50	PCPAH00029	0,49
SM1,5	1,5	175	155	135	2500	66,5	M5x80	50	PCPAH00030	0,51
SM1,75	1,75	160	140	120	2500	68,7	M5x80	50	PCPAH00031	0,53
SM 2	2	160	140	120	2500	70,9	M5x80	50	PCPAH00032	0,56

* One or more washers are always fitted to secure the bolt engagement

LM SERIES LATERAL PORTS GEAR PUMPS, GROUP 0

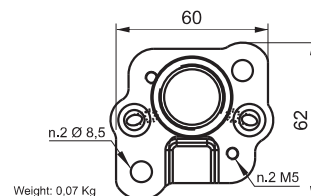


Main features

Oil temperature	
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M5 8.8 class steel tightening torque: 8 ÷ 9,5 Nm
Pressure definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Standard rotation direction: clockwise (from shaft side).
Counterclockwise rotation pumps can be mounted on request.
Ask our sales department.

Aluminium adapter flange to use group 0 pump
on PPC, SPU, PPL and EPB group 1 manifold
Code: E60513025



Spare part code

PCPAH *****

Nominal size:
see table

Assembly code

LM

Pump type:
LM = Group 0 LM series

0,3

Nominal displacement:
(cc/rev) see below table

V**

Optional relief valve:
where ** = (bar max)

Available range

Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
LM0,3	0,3	200	180	160	3500	55,7	M5x65	PCPAH00035	0,26
LM0,5	0,5	200	180	160	3500	57,5	M5x65	PCPAH00036	0,26
LM0,75	0,75	200	180	160	3500	59,8	M5x65	PCPAH00037	0,27
LM 1,0	1,0	200	180	160	3500	62	M5x70	PCPAH00038	0,30
LM1,25	1,25	200	180	160	3000	64,2	M5x70	PCPAH00039	0,32
LM1,5	1,5	175	155	135	2500	66,5	M5x70	PCPAH00040	0,35
LM1,75	1,75	160	140	120	2500	68,7	M5x75	PCPAH00041	0,37
LM 2,0	2,0	160	140	120	2000	70,9	M5x75	PCPAH00042	0,39

Other pumps executions with different pressure/speed ratings are available on request.

* A proper washer is to be forecast to adapt bolt lenght