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

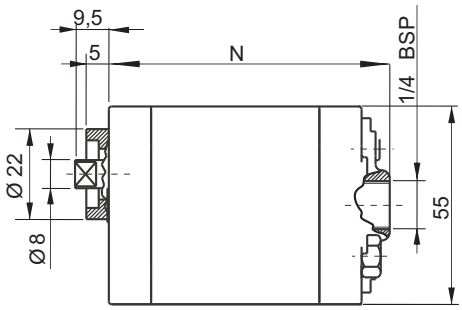
Why are pressure balanced gear pumps better than fixed clearance gear pumps used by many competitors?
Pressure balanced gear pumps are built with lateral pressure plates which reduce the mechanical clearance on the gears with the increase of the pressure on the outlet, thus greatly improving the volumetric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

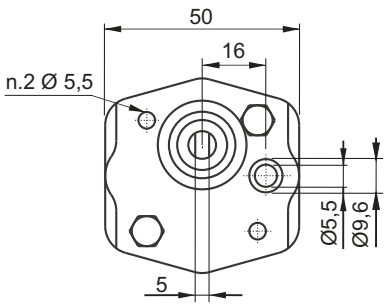
How can we mount both group 0 and group 1 pumps on the same Universal central manifold?
The group 1 pumps fit directly on the central manifold and are fixed by two bolts provided with the pump.
The group 0 pumps are fitted by the adaptor plate E60513025, which adapts the gr.0 pump front flange to the 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





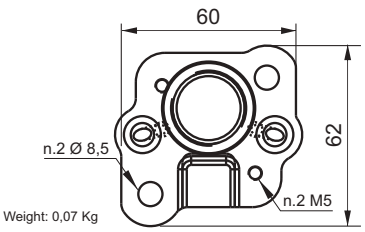


Main features

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

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 40 **

Pump type:
50 = Group 0

Series:
40 = K

Nominal size:
see table

PPM assembly code

KM — **Pump series:**
KM = K series

0,6 — **Nominal displacement**
cc/rev (see table below)

Available range

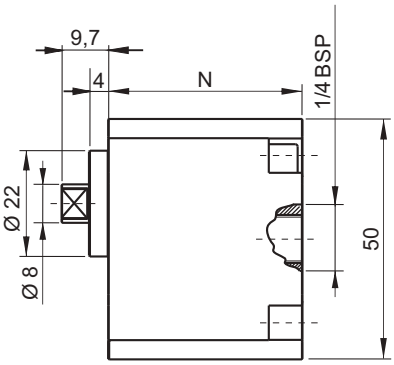
Nominal displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
0,26	200	180	160	6000	55	M5x65	E60504002	0,33
0,39	200	180	160	6000	57	M5x65	E60504004	0,35
0,64	200	180	160	6000	61	M5x65	E60504006	0,40
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

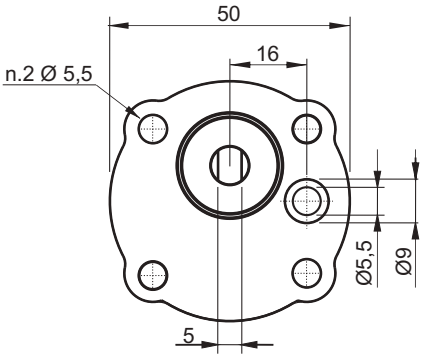
Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt lenght

H TYPE HIGH PRESSURE GEAR PUMPS, GROUP 0





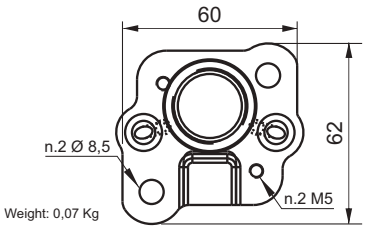


Main features

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



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

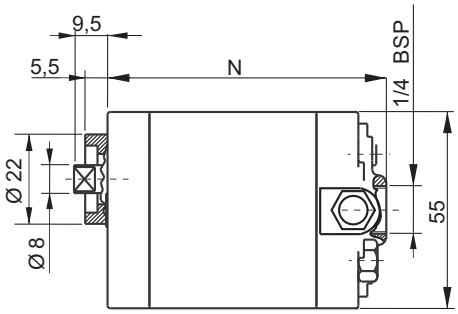
Nominal displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	Min Speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
0,2	280	270	250	7000	1800	36,4	5x50	E60505001	0,26
0,26	280	270	250	7000	1800	36,7	5x50	E60505002	0,27
0,38	280	270	250	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

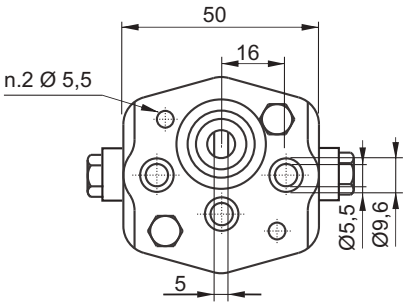
Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt lenght

RKM TYPE BIDIRECTIONAL GEAR PUMPS, GROUP 0



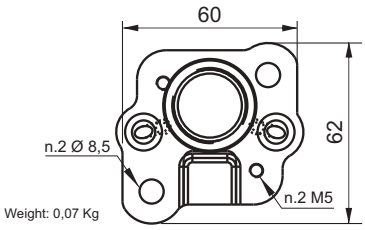




Main features

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

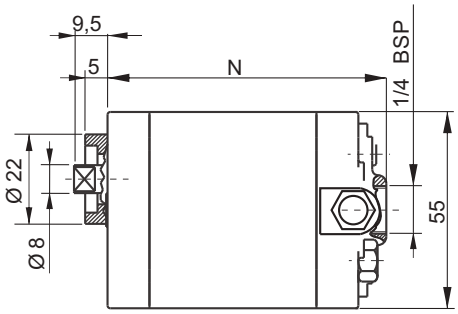
Nominal size	Nominal displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	Min speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
RKM0,2	0,26	190	170	150	7000	1000	68,5	M5x60	PCPAH00015	0,45
RKM0,3	0,32	190	170	150	7000	1000	69	M5x65	PCPAH00016	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

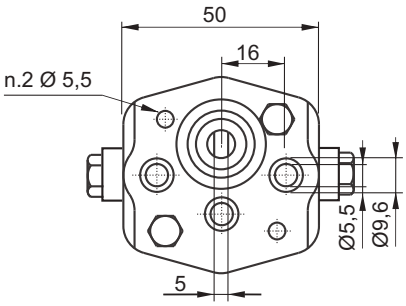
Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt lenght

RGM TYPE BIDIRECTIONAL GEAR PUMPS, GROUP 0



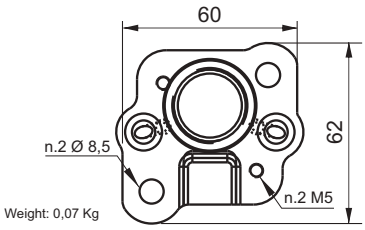




Main features

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



Spare part code

E60 50 35 **

Pump type:
50 = Group 0

Series:
35 = R

Nominal size:
see table

PPM assembly code

RGM — **Pump type:**
RGM = reversible G series

1,3 — **Nominal displacement:**
cc/rev (see below table)

Available range

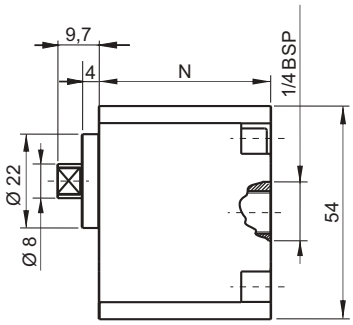
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Code marked on pump	Spare part code	Weight [Kg]
RGM0,1	0,19	190	170	150	7000	61,5	M5x55	U0.25R18GVNKX	E60503501	0,38
RGM0,2	0,26	190	170	150	7000	62,6	M5x55	U0.25R24GVNKX	E60503502	0,39
RGM0,3	0,32	190	170	150	7000	63,5	M5x60	U0.25R30GVNKX	E60503503	0,42
RGM0,4	0,38	190	170	150	7000	64,7	M5x60	U0.25R36GVNKX	E60503504	0,43
RGM0,5	0,51	190	170	150	7000	66,6	M5x60	U0.25R48GVNKX	E60503505	0,44
RGM0,7	0,64	190	170	150	7000	72,6	M5x65	U0.5R0,75GVNKX	E60503506	0,46
RGM0,9	0,88	190	170	150	7000	73,6	M5x70	U0.5R1,00GVNKX	E60503509	0,48
RGM1,3	1,25	190	170	150	5000	76,6	M5x70	U0.5R1,60GVNKX	E60503513	0,49
RGM1,5	1,5	190	170	150	4000	78,6	M5x75	U0.5R2,00GVNKX	E60503515	0,58

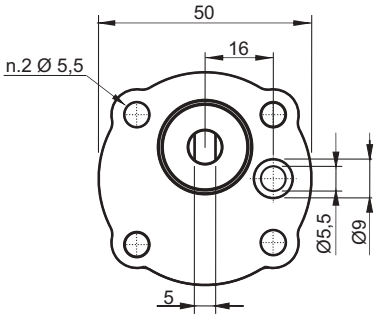
Other gear pumps with different pressure and speed available upon request.

* Washers may be fitted to adapt bolt lenght

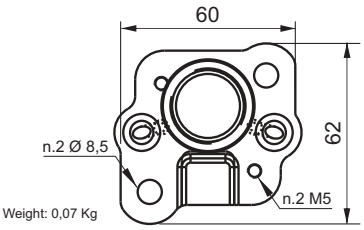
SM SERIES HELICOIDAL GEAR SILENT PUMPS, GROUP 0







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



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.

Spare part code

PCPAH ***

Nominal size:
see table

Assembly code

SM — **Series:**
SM = Group 0 S series

0,3 — **Size**

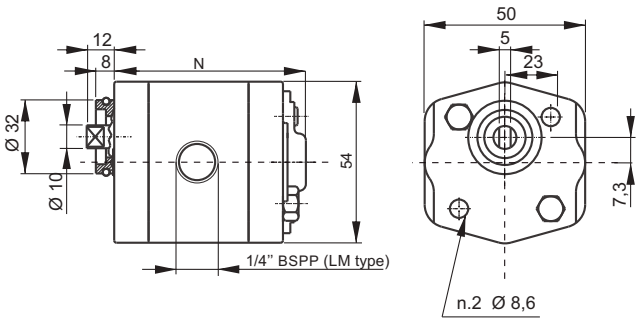
Available range

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



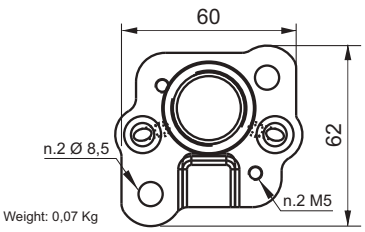


Main features

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

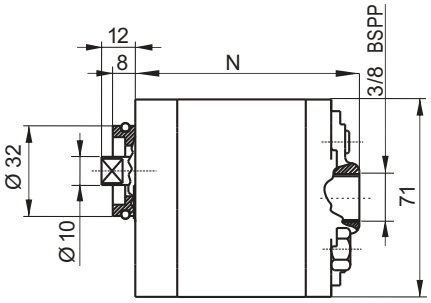
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
LM0,3	0,3	200	180	160	3500	55,7	M5x65	PCPAH00035	0,26
LM0,5	0,5	200	180	160	3500	57,5	M5x65	PCPAH00036	0,26
LM0,75	0,75	200	180	160	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

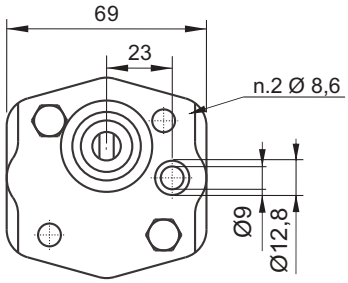
Other pumps executions with different pressure/speed ratings are available on request.

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

K SERIES GEAR PUMPS, GROUP 1







Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 8.8 class steel tightening torque: 21 ÷ 25 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.

Spare part code

E60 60 40 **

Type:
60 = Group 1

Series:
40 = K

Reference code:
see below table

Assembly code

K — **Series:** K = Group 1 K series

1,2 — **Size**

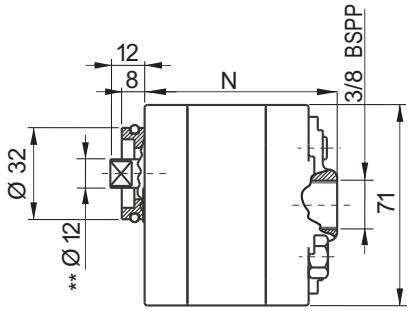
Available range

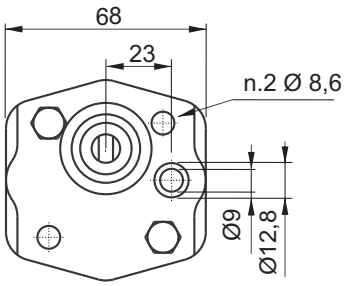
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
K0,9	0,87	250	230	200	4000	73,6	M8x80	E60604001	0,73
K1,2	1,27	250	230	200	4000	75,1	M8x80	E60604002	0,75
K1,6	1,66	250	230	200	4000	76,6	M8x80	E60604035	0,77
K2,1	2,11	250	230	200	4000	78,3	M8x85	E60604004	0,79
K2,7	2,8	250	230	200	4000	80,8	M8x85	E60604005	0,82
K3,2	3,17	250	230	200	4000	82,4	M8x85	E60604006	0,86
K3,7	3,7	230	210	180	3600	84	M8x90	E60604007	0,88
K4,2	4,2	230	210	180	3600	86	M8x90	E60604008	0,90
K5,0	5,0	210	180	140	3000	89	M8x95	E60604009	0,94
K6,0	6,0	210	180	140	3000	93	M8x100	E60604010	0,98
K7,9	8,0	180	140	100	3000	100,5	M8x105	E60604012	1,10

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

G SERIES GEAR PUMPS, GROUP 1







Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 8.8 class steel tightening torque: 21 ÷ 25 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.

Spare part code

E60 60 30 **

Type:
60 = Group 1

Series:
30 = G

Reference code:
see below table

Assembly code

G — **Series:** G = Group 1 G series

1,1 — **Size**

Available range

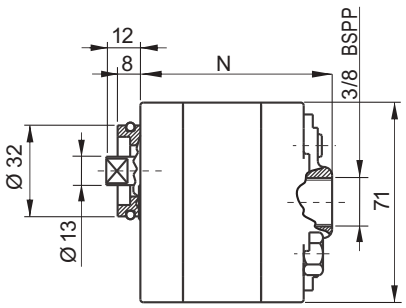
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Code marked on pump	Spare part code	Weight [Kg]
G0,8	0,9	250	230	210	6000	47	M8x55	EK1PD1.3G	E60603001	0,49
G1,1	1,15	250	230	210	6000	47,4	M8x55	EK1PD1.6G	E60603002	0,50
G1,3	1,3	250	230	210	6000	48,8	M8x55	EK1PD2G	E60603003	0,51
G1,6	1,6	250	230	210	6000	49,8	M8x55	EK1PD2.5G	E60603035	0,52
G2,1	2,1	250	230	210	6000	50,9	M8x55	EK1PD3.3G	E60603004	0,54
G2,6	2,6	250	230	210	6000	52,9	M8x60	EK1PD4.2G	E60603005	0,56
G3,2	3,2	230	210	190	5000	54,4	M8x60	EK1PD5G	E60603006	0,58
G3,7	3,7	230	210	190	4500	56,4	M8x60	EK1PD5.8G	E60603007	0,61
G4,2	4,2	230	210	190	4000	57,8	M8x65	EK1PD6.7G	E60603008	0,63
G4,9	4,9	210	190	170	3500	59,9	M8x65	EK1PD7.5G	E60603009	0,65
G6,0	5,8	210	190	170	3000	63,5	M8x70	EK1PD9.2G	E60603010	1,01
G7,9	8,0	200	180	160	2100	98,9	M8x105	K1PD11.5G	E60603012	1,12
G9,8	9,8	170	150	130	1700	106,5	M8x110	K1PD15G	E60603014	1,27

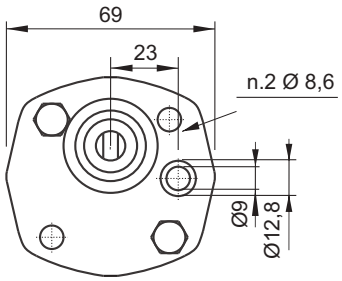
* One or more washers are always fitted to secure the bolt engagement

** Applies to all pumps except the pump code: JE60603012. For pumps code JE60603012 the shaft is Ø 10 mm.

H SERIES HIGH PRESSURE GEAR PUMPS, GROUP 1







Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 12.9 class steel tightening torque: 30 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.

Spare part code

E60 60 50 **

Type:
60 = Group 1

Series:
50 = H

Reference code:
see below table

Assembly code

H — **Series:** H = Group 1 H series

6,0 — **Size**

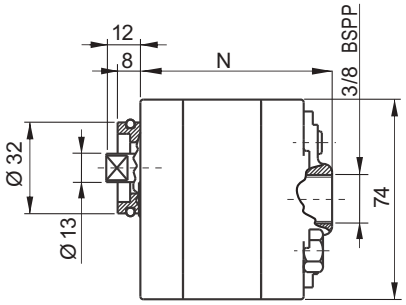
Available range

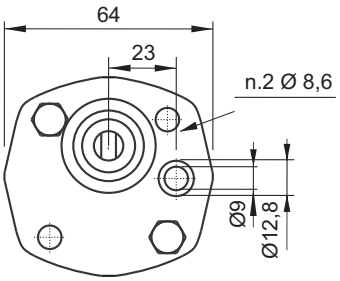
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Min speed [rpm]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
H1,2	1,2	280	270	250	1000	6000	48,8	M8x55	E60605002	0,50
H1,7	1,7	280	270	250	1000	6000	50,5	M8x60	E60605035	0,52
H2,2	2,2	280	270	250	800	5500	53,4	M8x60	E60605004	0,54
H2,6	2,6	280	270	250	800	5500	54,8	M8x60	E60605005	0,56
H3,2	3,2	280	270	250	600	5000	61,2	M8x70	E60605006	0,58
H3,8	3,8	280	270	250	600	5000	63,2	M8x70	E60605007	0,61
H4,2	4,2	280	270	250	600	4500	63,7	M8x70	E60605008	1,05
H4,7	5,0	280	270	250	600	3200	93,0	M8x100	E60605009	1,12
H6,0	6,0	230	210	190	600	3000	96,3	M8x105	E60605010	1,22
H7,4	7,4	230	210	190	600	2500	106,4	M8x115	E60605012	1,80

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

VH SERIES VERY HIGH PRESSURE GEAR PUMPS, GROUP 1







Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 12.9 class steel tightening torque: 30 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.

Spare part code

PCPAH ***

Nominal size:
see table

Assembly code

VH — **Series:**
VH = Group 1 H series

1,2 — **Size**

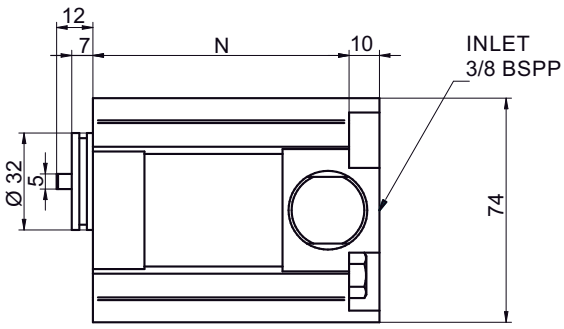
Available range

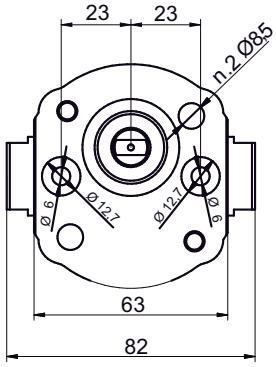
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Min speed [rpm]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
VH 1,2	1,19	370	350	320	1200	6000	76	M8x90	PCPAH00043	1,43
VH 1,7	1,67	370	350	320	1200	6000	78	M8x90	PCPAH00044	1,45
VH2,2	2,17	370	350	320	1000	5500	80	M8x90	PCPAH00046	1,48
VH 2,6	2,57	370	350	320	800	5000	83	M8x95	PCPAH00047	1,52
VH 3,2	3,16	370	350	320	800	4500	84	M8x95	PCPAH00048	1,53
VH 3,8	3,63	370	350	320	800	4000	86	M8x95	PCPAH00049	1,55
VH 4,3	4,14	370	350	320	700	3600	93	M8x105	PCPAH00050	1,68
VH 5,0	4,72	370	350	320	700	3400	95	M8x105	PCPAH00051	1,72
VH 6,0	5,62	370	350	320	700	3200	98	M8x110	PCPAH00052	1,74
VH 7,8	7,3	340	330	310	600	3000	104	M8x115	PCPAH00053	1,77
VH 8,0	7,8	320	310	290	600	2800	106	M8x115	PCPAH00054	1,79
VH 10	9,8	255	240	230	600	2600	113	M8x125	PCPAH00055	1,96
VH 11	10,6	235	220	210	600	2400	116	M8x130	PCPAH00056	1,98

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

RH SERIES BIDIRECTIONAL GEAR PUMPS, GROUP 1







Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	-0,5 < P > 2,0 bar (absolute pressure)
Fixing bolts	2 x M8 8.8 class steel tightening torque: 21 ÷ 25 Nm
Pressure definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Spare part code

PCPAH0000X

Reference code:
see below table

Assembly code

RH — **Series:**
RH = reversible H series

3,2 — **Size**

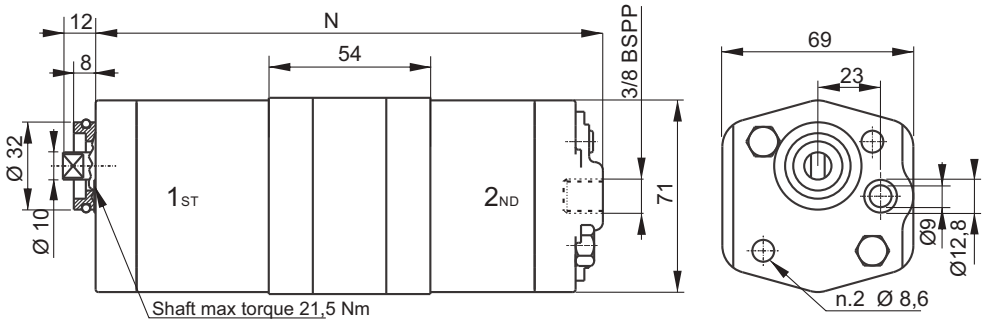
Available range

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]
R2,1	2,2	280	270	250	3600	77,2	M8x95	PCPAH00004	0,93
R2,6	2,6	280	270	250	3000	78,7	M8x95	PCPAH00005	0,96
R3,2	3,2	280	270	250	2500	80,9	M8x95	PCPAH00006	1,03
R4,3	4,2	280	270	250	1900	84,6	M8x100	PCPAH00007	1,13
R6,0	5,6	210	200	190	1500	90,2	M8x105	PCPAH00008	1,24

Recommended oil viscosity for continuous use: 25 - 100 mm2/s
Other pumps with different displacement/pressure/speed are available on request.

K SERIES TANDEM GEAR PUMPS, GROUP 1





Common 3/8'' BSPP inlet port (on the rear cover) alternatively individual side inlet ports are available

Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 8.8 class steel tightening torque: 21 ÷ 25 Nm
Pressure definition	Peak pressure: cycle 2 s ON Intermittent pressure: cycle 20 s ON Continuous pressure: cycle always ON

Choosing the right pump combination:

- Check that the power absorption of the front element is equal to or higher than the rear one
- Pump performance and features are the same as the details of the corresponding single pumps
- Tandem pump maximum rotation speed is determined by the lowest speed between maximum rotation speeds of each single pump.
- Torque applied on the shaft of the front pump is the sum of the torques absorbed by the two pumps (see above diagram); this value must never go over the limit allowed for the shaft (21,5 Nm).

Spare part code

E60 60 ** ** HL

Type:
60 = Group 1

Reference code:
see below table

Series:
HL = Hi-Lo

Assembly code

K — **Series:** K = Group 1 K series

1,2 — **Size 1st section**

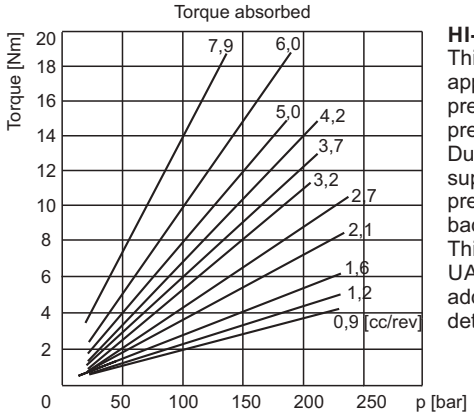
+

5 — **Size 2nd section**

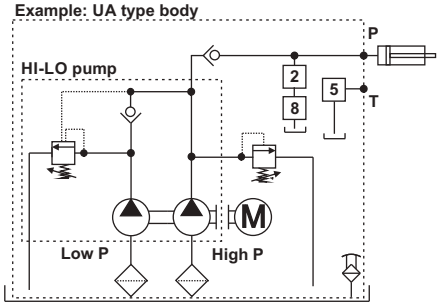
HL — **Option:** Hi - Lo execution

Available range

Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Preset unloading pressure* [bar]	Max speed [rpm]	N [mm]	Bolts** [mm]	Spare part code	Weight [Kg]
K0,9+3,2HL	0,89 + 3,3	250	230	210	42±5	1750	158,2	M8x150	E60600932HL	2,12
K1,2+5,0HL	1,27 + 5,1	250	230	210	42±5	1750	166,3	M8x160	E60601250HL	2,29



HI-LO
This is an efficient and energy saving solution for applications where a fast approach and a high pressure working phase are needed (industrial presses, garbage compactors, balers,...).
During the high speed phase both pumps are supplying flow to the system while during the high pressure phase, the low pressure pump is discharged back to tank with no load.
This solution can be conveniently assembled with our UA or UB or U4 central manifold without any additional kit. Ask to our technical office for more details.



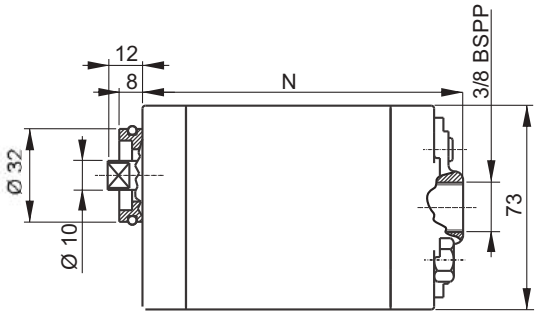
* One or more washers are always fitted to secure the bolt engagement

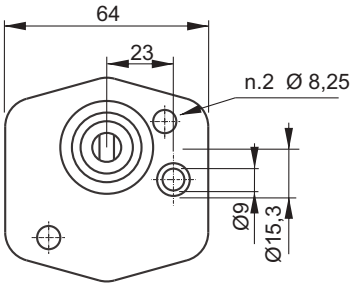
Other pumps with different displacement/pressure/speed are available on request.

* Preset value of the unloading valve can be adjusted between 15 - 60 bar.

S SERIES HELICOIDAL GEAR SILENT PUMPS, GROUP 1







Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 8.8 class steel tightening torque: 21 ÷ 25 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.

Spare part code

S60 60 30 **

Series:
S = Silent

Type:
60 = Group 1

Reference code:
see below table

Assembly code

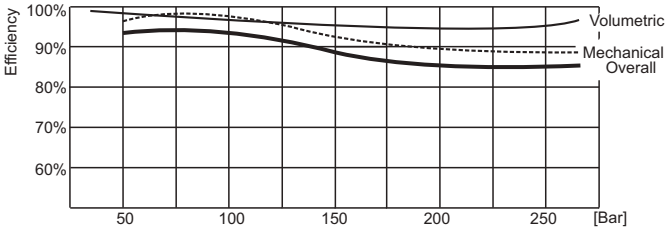
S — **Series:** S = Group 1 S series

5,0 — **Size**

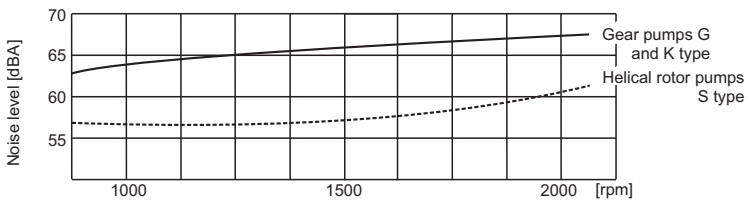
Available range

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]
S2,2	2,2	280	250	210	3500	86	M8x85	50	S60603004	0,85
S3,2	3,2	280	250	210	3200	91,3	M8x85	51	S60603006	0,9
S4,3	4,3	280	250	210	2800	96,2	M8x100	52	S60603008	0,95
S5,0	5,0	260	235	210	2000	100	M8x100	52	S60603009	1,1
S6,0	6,0	210	190	180	2000	104,8	M8x105	57	S60603010	2,03
S8,5	8,5	150	130	110	2000	111,7	M8x130	57	PCPAH00033	2,1
S9,8	9,8	120	110	100	2000	117	M8x130	57	PCPAH00034	2,13

14cc/rev double low noise pump is available on request



Note: reference values measured at 1500rpm with oil ISO VG 46 cSt at 40 ° C.

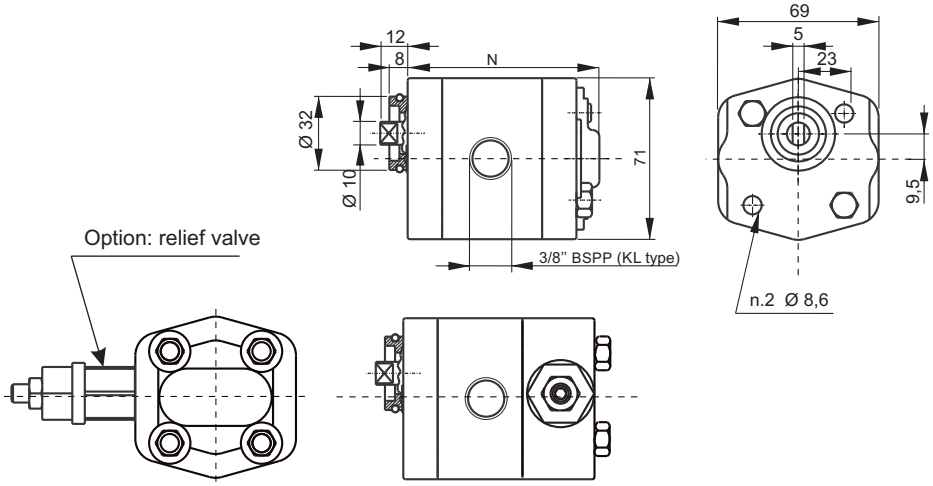


** The noise level is for guidance only since it depends on the values of the resonance of the mounting structure and other components of the system.

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

KL SERIES GEAR PUMPS, GROUP 1





Main features

Oil temperature	-15 ÷ +80 °C
Inlet pressure	0,7 < P < 3,0 bar (absolute pressure)
Fixing bolts	2 x M8 8.8 class steel tightening torque: 21 ÷ 25 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.

Spare part code

E60 60 42 **

Pump type:
60 = Group 1

Size:
see below table

Assembly code

KL — **Pump type:**
KL = KL series

1,2 — **Nominal displacement:**
(cc/rev) see below table

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

Available range

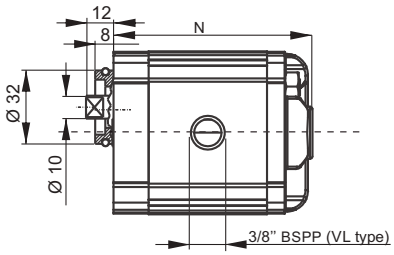
Nominal Displacement (cc/rev)	Peak pressure (bar)	Intermittent pressure (bar)	Continuous pressure (bar)	Max speed (rpm)	N (mm)	Bolts* (mm)	Spare part code	Weight
0,9	250	230	200	4500	73	M8x75	E60604201	0,73 Kg
1,2	250	230	200	4500	74	M8x75	E60604202	0,75 Kg
1,6	250	230	200	4500	76	M8x80	E60604235	0,77 Kg
2,1	250	230	200	4500	78	M8x80	E60604204	0,79 Kg
2,7	250	230	200	4500	78	M8x80	E60604205	0,82 Kg
3,2	250	230	200	4500	83	M8x85	E60604206	0,86 Kg
3,7	230	210	180	3600	85	M8x85	E60604207	0,88 Kg
4,2	230	210	180	3600	87	M8x90	E60604208	0,90 Kg
5,0	210	180	140	3000	89	M8x90	E60604209	0,94 Kg
6,0	210	180	140	3000	93	M8x100	E60604210	0,98 Kg
7,9	180	140	100	3000	93	M8x110	E60604212	1,10 Kg

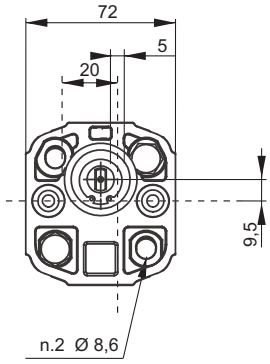
Other pumps executions with different pressure/speed ratings are available on request.

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

VL SERIES GEAR PUMPS, GROUP 1

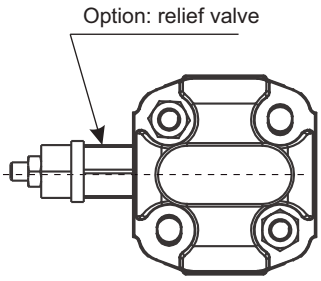






Main features

Oil temperature	-15 ÷ +80 °C
Fixing bolts	2 x M8 8.8 class steel tightening torque: 25 ÷ 29 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.

Spare part code

PCPAH0000*

Size:
see below table

Assembly code

VL — **Pump type:**
VL = VL series

9,8 — **Nominal displacement:**
(cc/rev) see below table

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

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
9,8	230	210	190	4000	111,3	M8x115	PCPAH00001	1,5 Kg

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

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