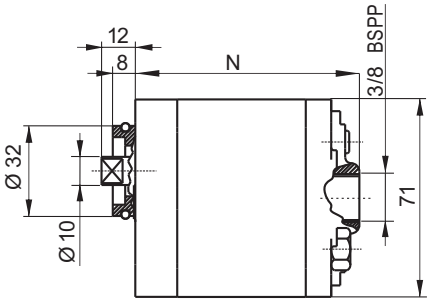
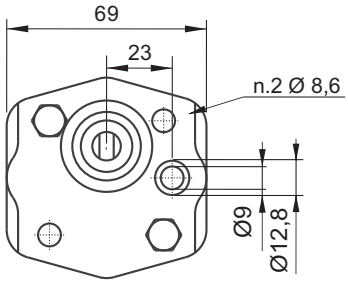
K SERIES GEAR PUMPS, GROUP 1







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**

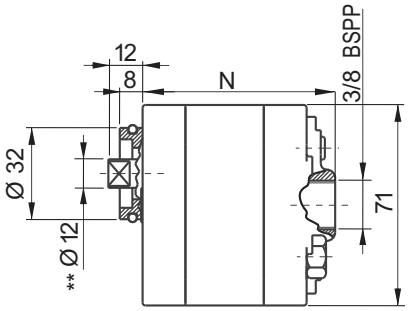
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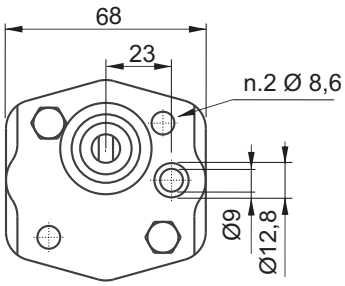
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
K0,9	0,87	250	230	200	4000	73,6	M8x80	E60604001	0,73
K1,2	1,27	250	230	200	4000	75,1	M8x80	E60604002	0,75
K1,6	1,66	250	230	200	4000	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

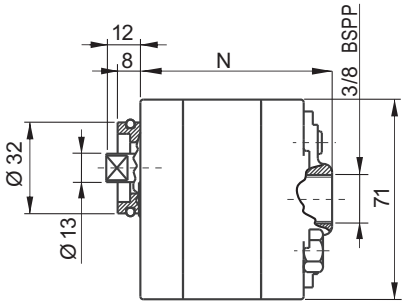
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Code marked on pump	Spare part code	Weight [Kg]
G0,8	0,9	250	230	210	6000	47	M8x55	EK1PD1.3G	E60603001	0,49
G1,1	1,15	250	230	210	6000	47,4	M8x55	EK1PD1.6G	E60603002	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

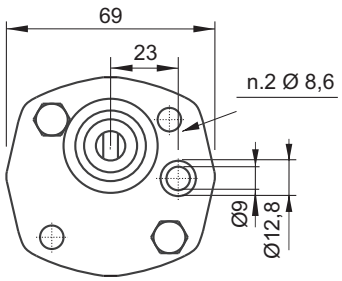
* One or more washers are always fitted to secure the bolt engagement

** 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**

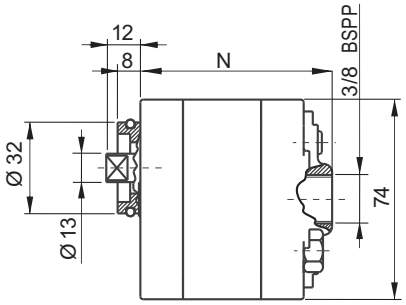
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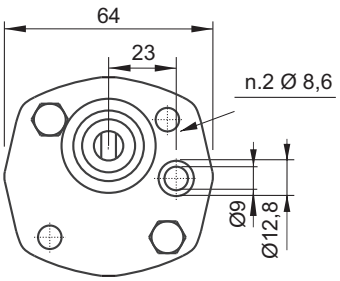
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Min speed [rpm]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
H1,2	1,2	280	270	250	1000	6000	48,8	M8x55	E60605002	0,50
H1,7	1,7	280	270	250	1000	6000	50,5	M8x60	E60605035	0,52
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**

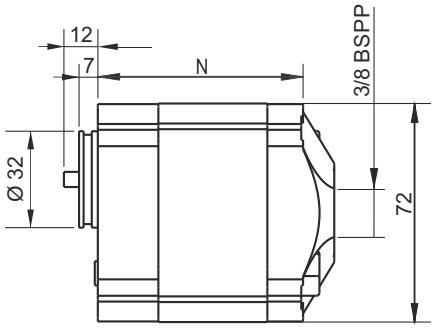
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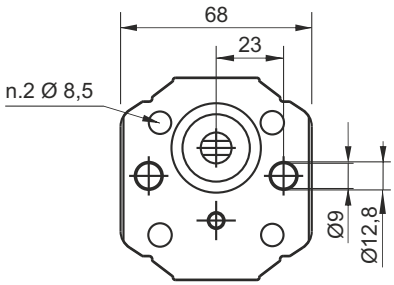
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Min speed [rpm]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
VH 1,2	1,19	370	350	320	1200	6000	76	M8x90	PCPAH00043	1,43
VH 1,7	1,67	370	350	320	1200	6000	78	M8x90	PCPAH00044	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

R SERIES BIDIRECTIONAL 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

Spare part code

E60 60 35 **

Type:
60 = Group 1

Series:
35 = R

Reference code:
see below table

Assembly code

R — **Series:** R = Group 1 R series

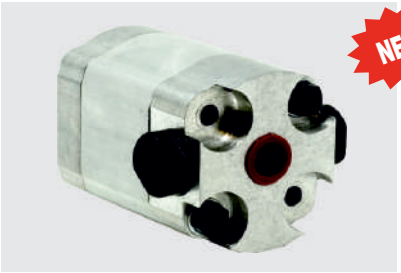
3,2 — **Size**

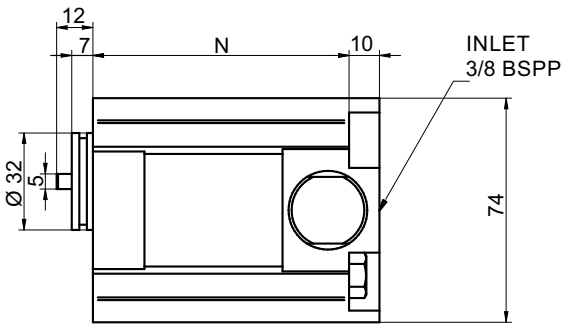
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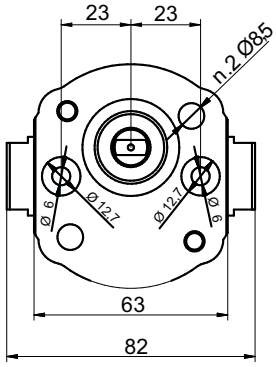
Nominal size	Displacement [cc/rev]	Peak pressure [bar]	Intermittent pressure [bar]	Continuous pressure [bar]	Max speed [rpm]	N [mm]	Bolts* [mm]	Spare part code	Weight [Kg]
R2,1	2,2	270	260	250	4000	68,7	M8x85	E60603504	0,92
R2,6	2,6	270	260	250	4000	70,5	M8x85	E60603505	0,95
R3,2	3,2	240	230	220	4000	72,8	M8x90	E60603506	0,98
R4,3	4,3	150	140	130	4000	76,4	M8x95	E60603508	1,05
R6,5	6,5	120	110	100	3500	83,2	M8x100	E60603510	1,32

* One or more washers are always fitted to secure the bolt engagement
Other pumps with different displacement/pressure/speed are available on request.

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**

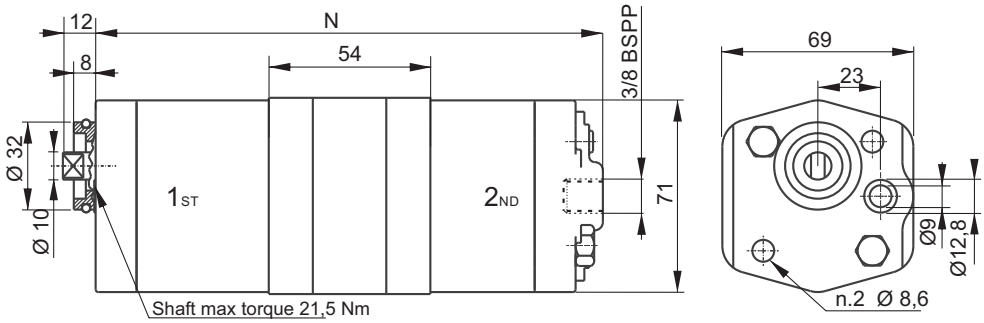
Available range

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**

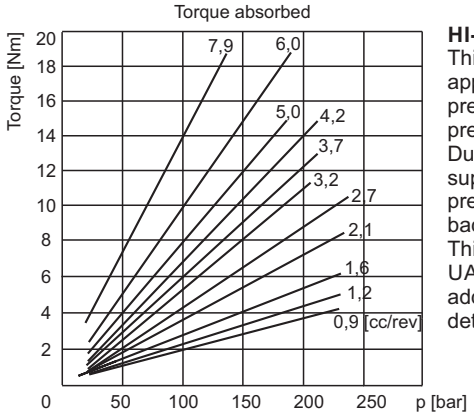
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5 — **Size 2nd section**

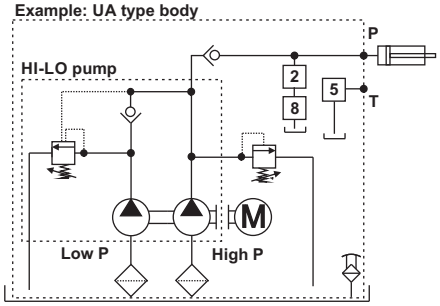
HL — **Option:** Hi - Lo execution

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.



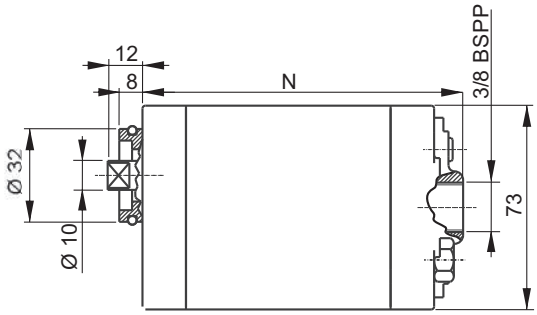
* One or more washers are always fitted to secure the bolt engagement

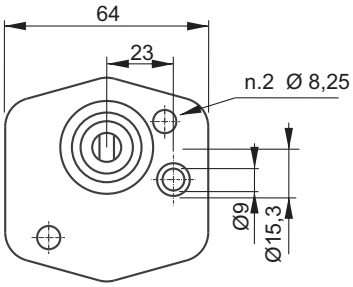
Other pumps with different displacement/pressure/speed are available on request.

* 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

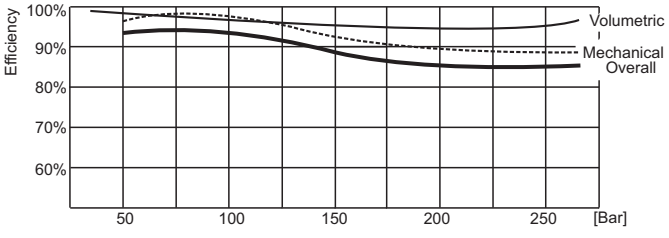
S — **Series:** S = Group 1 S series

5,0 — **Size**

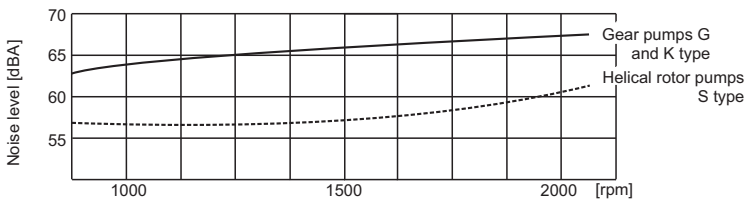
Available range

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.

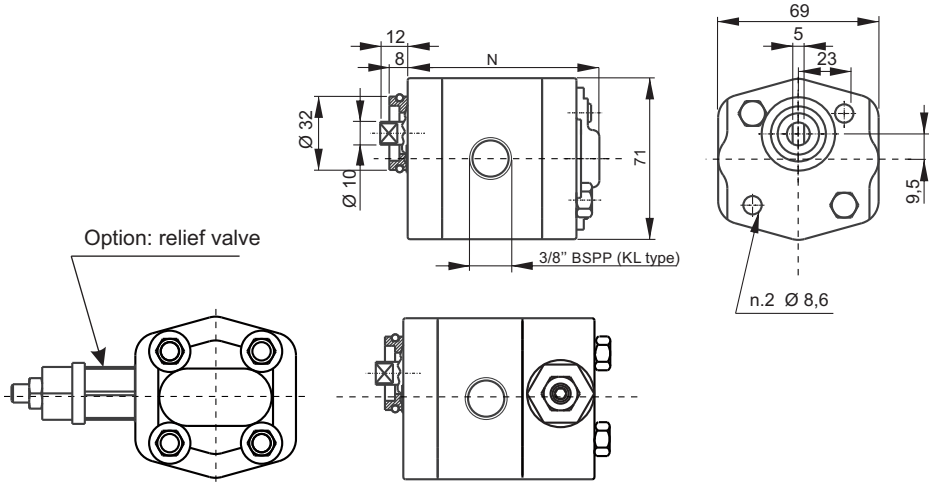


** The noise level is for guidance only since it depends on the values of the resonance of the mounting structure and other components of the system.

* 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

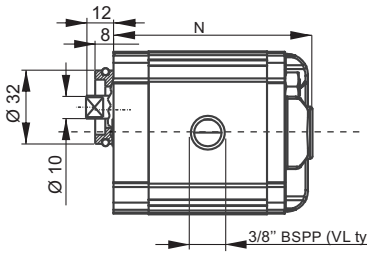
Nominal Displacement (cc/rev)	Peak pressure (bar)	Intermittent pressure (bar)	Continuous pressure (bar)	Max speed (rpm)	N (mm)	Bolts* (mm)	Spare part code	Weight
0,9	250	230	200	4500	73	M8x75	E60604201	0,73 Kg
1,2	250	230	200	4500	74	M8x75	E60604202	0,75 Kg
1,6	250	230	200	4500	76	M8x80	E60604235	0,77 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

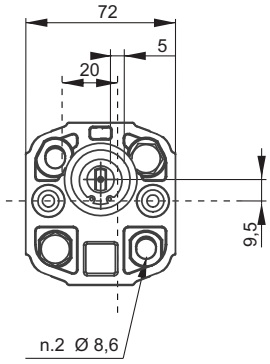
Other pumps executions with different pressure/speed ratings are available on request.

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

VL SERIES GEAR PUMPS, GROUP 1

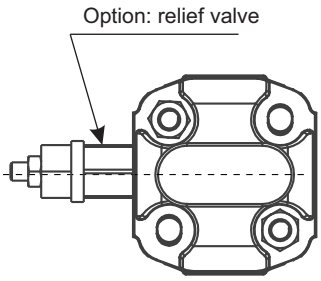






Main features

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