



Technical Information

GearMeAluminum Group 2 Flex Pump





Revision history

Table of revisions

Date	Changed	Rev
June 2023	Added marking position model code option	0207
February 2023	Fixed typo	0206
January 2023	Renamed product	0205
July 2022	QR code on page 5 corrected	0204
June 2022	Updated pump model code information (special features)	0203
March 2022	Small updates	0202
January 2022	Changed cover image, Edited flanges specs and product code information	0201
April 2021	Corrected PS1 Schematic	0102
March 2021	First edition	0101



GearMe Aluminum Group 2 Flex Pump

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Adapter kit

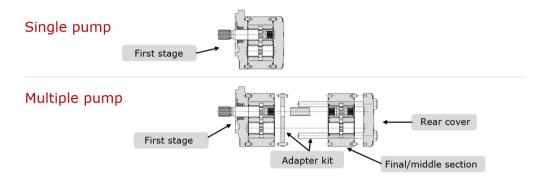
Dimensions



General Information

Overview

The Flex Program is a flexible solution which gives distributors the possibility to assemble different modules and components according to end-customer specific requirements.

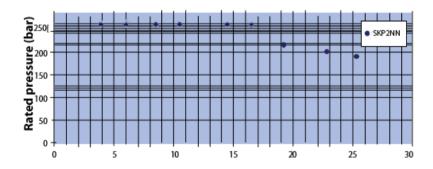


The basic layout is designed to have:

- Pre-assembled first sections from factory (submitted to cut-in and tested) then equipped with special shaft with rear spline.
- Mid "sections" provided without flange and cover (submitted to cut-in and tested)
- · Components (intermediate flanges with coupling, rear covers, assembly screws) supplied individually

Pump displacements

Quick reference chart for pump displacements vs rated pressure





General Information

Training videos

Training videos are accessible at this link: Gear Pumps and Motors - YouTube





Technical Information

Technical data

Frame size		4.0	6.0	8.0	011	014	017	019	022	025
Displacement	cm ³ /rev [in ³ / rev]	3.9 [0.24]	6.0 [0.37]	8.4 [0.51]	10.8 [0.66]	14.4 [0.88]	16.8 [1.02]	19.2 [1.17]	22.8 [1.39]	25.2 [1.54]
SKP2										
Peak pressure	bar [psi]	280 [4060]	280 [4060]	280 [4060]	280 [4060]	280 [4060]	280 [4060]	260 [3770]	230 [3335]	200 [2900]
Rated pressure		250 [3625]	250 [3625]	250 [3625]	250 [3625]	250 [3625]	250 [3625]	240 [3480]	210 [3045]	190 [2755]
Minimum speed at 0-100 bar	min ⁻¹ (rpm)	600	600	600	500	500	500	500	500	500
Minimum speed at 100-180 bar		1200	1200	1000	800	750	750	700	700	700
Min. speed at 180 bar to rated pressure		1400	1400	1400	1200	1000	1000	1000	800	800
Maximum speed		4000	4000	4000	4000	3500	3000	3000	3000	3000
Both		<u>'</u>		<u>'</u>		<u> </u>		<u>'</u>	<u>'</u>	
Weight	kg [lb]	2.3 [5.1]	2.4 [5.3]	2.5 [5.5]	2.7 [5.8]	2.9 [6.3]	3.0 [6.5]	3.1 [6.7]	3.2 [7.0]	3.3 [7.3]
Moment of inertia of rotating components	x 10 ⁻⁶ kg•m ² [x 10 ⁻⁶ lb•ft ²]	21.3 [505]	26.5 [629]	32.4 [769]	38.4 [911]	47.3 [1122]	53.3 [1265]	59.2 [1405]	68.1 [1616]	74.1 [1758]
Theoretical flow at maximum speed	l/min [US gal/ min]	15.6 [4.1]	24.0 [6.3]	33.6 [8.9]	43.2 [11.4]	50.4 [13.3]	50.4 [13.3]	57.6 [15.2]	68.4 [18.0]	75.6 [20.0]

 $1 \text{ kg} \cdot \text{m}^2 = 23.68 \text{ lb} \cdot \text{ft}^2$



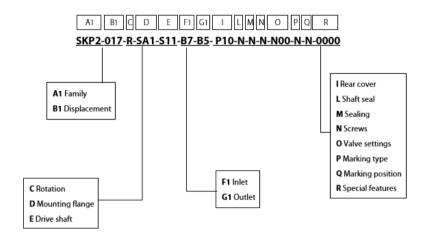
Caution

The rated and peak pressure mentioned are for pumps with flanged ports only. When threaded ports are required a de-rated performance has to be considered. To verify the compliance of a high pressure application with a threaded ports pump apply to a Danfoss representative.



Product Code

Pump model code - Modules



A Family

SKP2	High Torque Group 2 Pump
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B Displacement

4.0	3.9 cm ³ /rev [0.240 in ³ /rev]
6.0	6.0 cm ³ /rev [0.360 in ³ /rev]
8.0	8.4 cm ³ /rev [0.513 in ³ /rev]
011	10.8 cm ³ /rev [0.659 in ³ /rev]
014	14.4 cm ³ /rev [0.879 in ³ /rev]
017	16.8 cm ³ /rev [1.025 in ³ /rev]
019	19.2 cm ³ /rev [1.171 in ³ /rev]
022	22.8 cm ³ /rev [1.391 in ³ /rev]
025	25.2 cm ³ /rev [1.538 in ³ /rev]

Other frame sizes and displacements are available upon request.

C Rotation

R	Right (Clockwise)
L	Left (Counterclockwise)

D Mounting flange

NNN	Without flange
E10	European flange pilot Ø36,5+4 holes
B10	German 4 bolts pilot Ø80
B20	German 2-bolt (\ pattern through body) pilot Ø50

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Product Code

B22	German 2-bolt (/ pattern through body) pilot Ø50
SA1	SAE A pilot Ø82,55+2 holes
SA2	SAE A pilot Ø82,55+2 holes+seal on pilot
SB1	SAE B-pilot Ø101,6+2 holes (available only with drive shaft S13)

E Drive Shaft

T50	Taper 1:5-M12x1,25-Key 3
T80	Taper 1:8-M12x1,25-Key 4
PS1	Parallel SAE Ø15,875 (Ø5/8") - L23,8 - Key 4x18
PS3	Parallel SAE Ø19,05 (Ø3/4") - L23,8 - Key 4,775x20
S09	Spline SAE J498-9T-16/32
S11	Spline SAE J498-11T-16/32
S13	Splined SAE J498-13T-16/32 (available only with mounting flange SB1)
SD1	Spline DIN 5482 B17x14 - L10
SD2	Spline DIN 5482 B17x14 - L14
N11	No shaft end - internal spline two sides

F Inlet size; G Outlet size

B5	15x35xM6
В6	15x40xM6
B7	20x40xM6
С3	13,5x30xM6
C5	13,5x40xM8
C 7	20x40xM8
D5	M18x1,5
D7	M22x1,5
E4	3/4-16UNF
E5	7/8-14UNF
E 6	1-1/16-12UN
F3	3/8 GAS
F4	1/2 GAS
F5	3/4 GAS
NN	Without port on body

For ports combination refer to aluminum gear pumps group 2 catalog, document #BC315962412551

I Rear cover

NNN	Without cover
P10	Standard pump cover
I10	Cover with relief valve



Product Code

L Shaft seal

V	VITON
V	VITON

M Sealing

N	NBR

N Screws

В	Anti-corrosion screws				
N	Burnished screws				
0	Without screws				

O Valve settings

NOO	No valve
V**	Integral relief valve

For valve settings refer to aluminum gear pumps group 2 catalog.

P Marking type

N	Standard Danfoss Marking				
A	Standard Danfoss Marking+Customer Code				
Z	Without Marking				

Q marking position

S Sticker on the body

R Special features

0000	No special features				
IS00	Drive shaft with internal spline at the end, which can also be used as a first stage of a multiple pump				
ВРС0	Body for ports on cover				
BSI0	Body for single inlet				
B017	Short bearings				
X001	IS00+BSI0				
X002	IS00+B017				
X003	X001+B017				

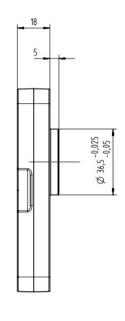
Special features are available upon request. Refer to "Training videos" chapter for more information about special features.

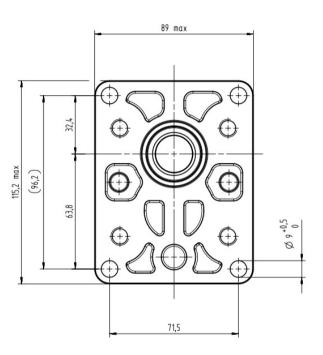
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Flanges

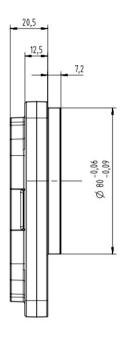
E10

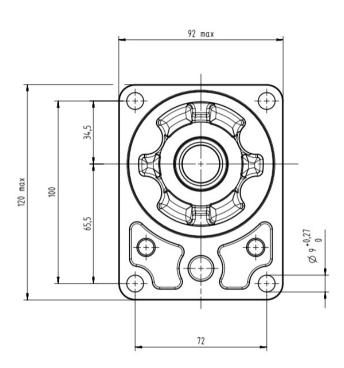




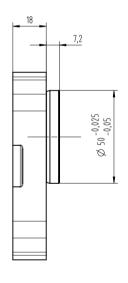


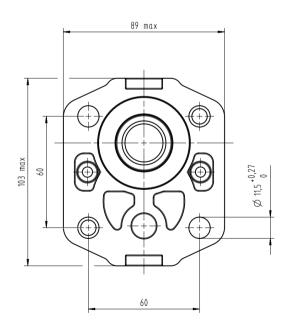
B10





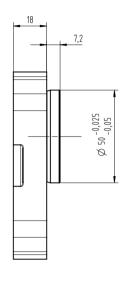
B20

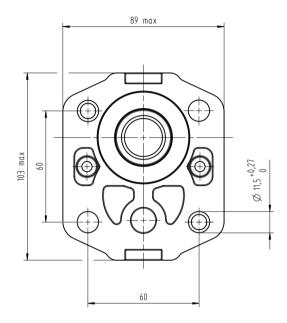




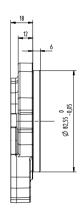


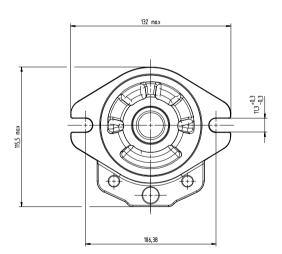
B22





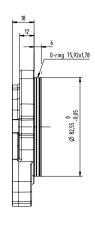
SA1

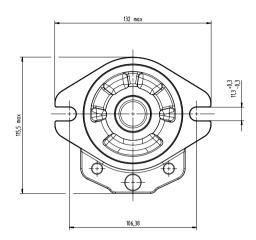




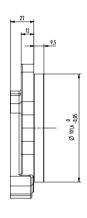


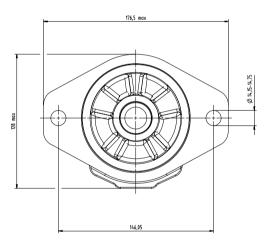
SA2





SB1



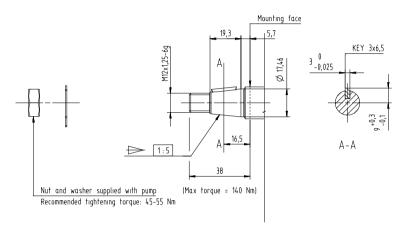




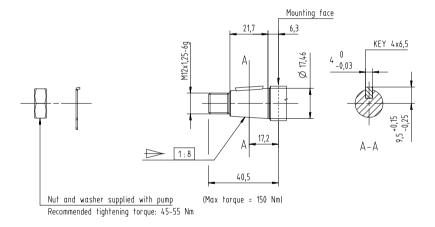
Shaft options

Shafts

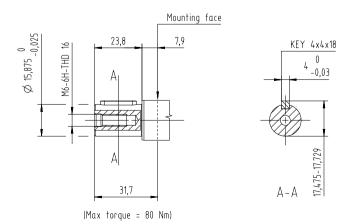
T50



T80



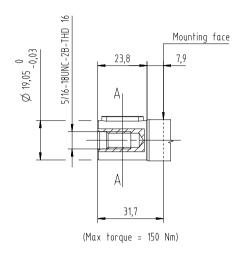
PS1

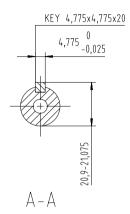




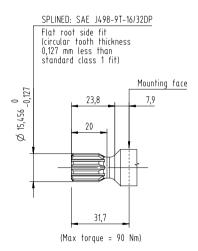
Shaft options

PS3

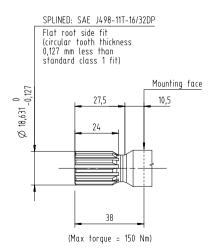




S09



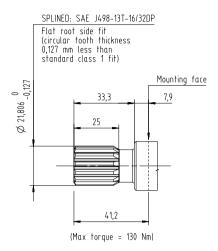
S11



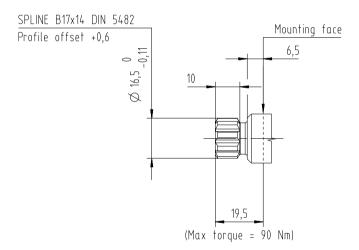


Shaft options

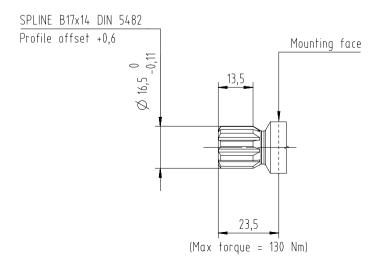
S13



SD1



SD2





Adapter kit

The adapter kit is required to combine two single pumps in one multiple pump. With the special coupling it is possible to sustain up to 120 Nm torque transmission, with the following advantages:

- High simultaneous working pressure by stages available
- High displacements by stages

The intermediate plate has also passed 200 hours salt spray test.

The adapter kit, code 11268956, is composed by:

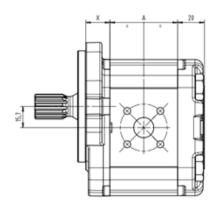
- Intermdediate plate
- Dowel
- Coupling

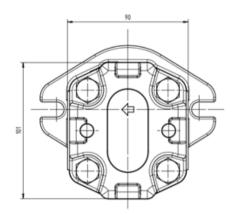






Dimensions





Frame size	4.0	6.0	8.0	011	014	017	019	022	025
Dimension A	50.5	54	58	62	68	72	76	82	86

Mounting flange	E10	B10	B20 (B22)	SA1 (SA2)	SB1
Dimension X	18	20.5	18	18	22



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