

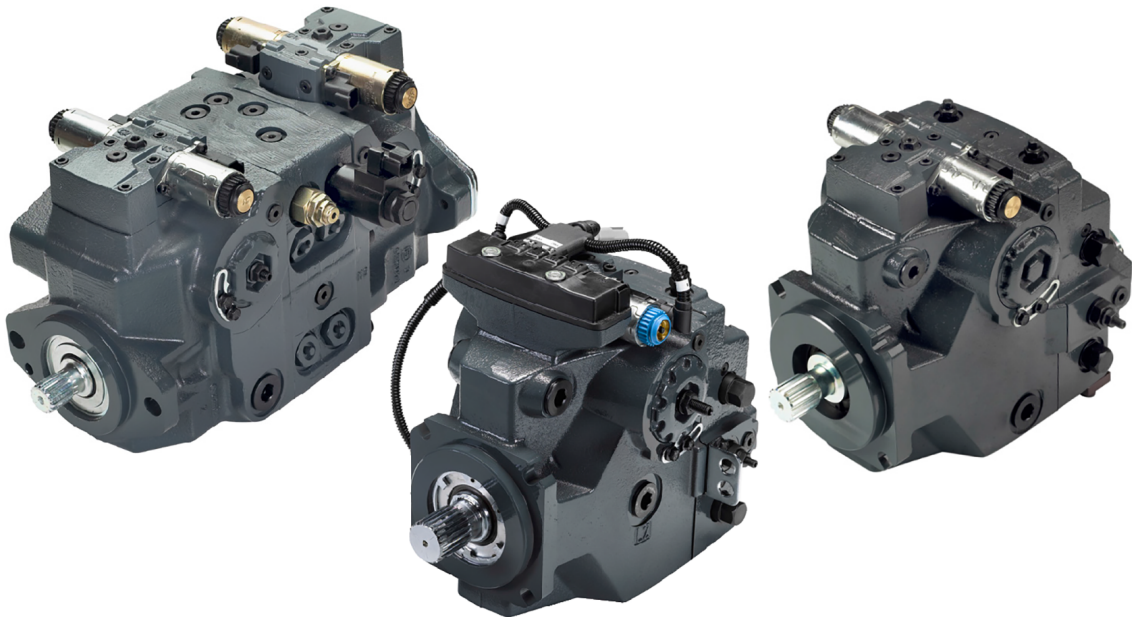
ENGINEERING
TOMORROW



Product Line Overview

H1 Axial Piston Pumps

Single and Tandem



Revision history

Table of revisions

Date	Changed	Rev
April 2017	Converted to DITA CMS.	0802
May 2002	First edition	AA

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Product Line Overview
H1 Axial Piston Pumps, Single and Tandem

Technical specifications

Overview of H1 pumps technical specifications

The table below shows the available range of H1 pumps as of this printing, with their respective speed, pressure, weight and mounting flange:

Feature	045	053	060	068	069	078	089	100	115	130	147	165	210	250
Displacement cm³ [in³]	45.0 [2.75]	53.8 [3.28]	60.4 [3.69]	68.0 [4.15]	69.2 [4.22]	78.1 [4.77]	89.2 [5.44]	101.7 [6.21]	115.2 [7.03]	130.0 [7.93]	147.2 [8.98]	165.1 [10.08]	211.5 [12.91]	251.7 [15.36]
Rated speed min⁻¹ (rpm)	3400	3400	3500	3500	3500	3500	3300	3300	3200	3200	3000	3000	2600	2600
Max speed min⁻¹ (rpm)	3500	3500	4000	4000	4000	4000	3800	3800	3400	3400	3100	3100	2800	2800
Max working pressure¹⁾ bar [psi]	420 [6090]	380 [5510]	420 [6090]	380 [5510]	450 [6525]	450 [6525]	450 [6525]	450 [6525]	450 [6525]	450 [6525]	450 [6525]	450 [6525]	450 [6525]	450 [6525]
Max pressure bar [psi]	450 [6525]	400 [5800]	450 [6525]	400 [5800]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]
Weight dry (W/O PTO, filter); kg [lb]	single: 41 [90] tandem: 65 [143]		50 [110]	50 [110]	56 [123]	56 [123]	62 [137]	62 [137]	83 [187]	83 [187]	96 [211]	96 [211]	163 [360]	163 [360]
Mounting flange	SAE B 2-bolt	SAE B 2-bolt	SAE C 4-bolt	SAE C 4-bolt	SAE C 4-bolt	SAE C 4-bolt	SAE C 4-bolt	SAE C 4-bolt	SAE D 4-bolt	SAE D 4-bolt	SAE D 4-bolt	SAE D 4-bolt	SAE E 4-bolt	SAE E 4-bolt

¹⁾ Applied pressures above maximum working pressure requires Danfoss application approval.

Control options

Size	045/053 Tandem	045/053 Single	060/068	069/078	089/100	115/130	147/165	210/250
EDC	●	●	●	●	●	●	●	●
MDC	●	●	●	●	●	●	●	●
FNR	●	●	●	●	●	●	–	–
NFPE	●	●	●	●	●	●	●	●
FDC	–	●	●	●	●	●	●	●
AC	–	●	●	●	●	●	●	●

For more details go to the website <http://www.powersolutions.danfoss.com/literature/> or see *H1 pumps literature reference* on page 5.

Technical specifications
H1 pumps literature reference
Available literature for H1 Pumps

Title	Literature Type	Order number	
		OLD	NEW
H1 Axial Piston Pumps, Single and Tandem	Product Line Overview	L1012919	AM00000001en-US
H1 Axial Piston Pumps, Single and Tandem	Basic Information	11062168	BC00000057en-US
H1 Axial Piston Tandem Pumps, Size 045/053	Technical Information	11063345	BC00000060en-US
H1 Axial Piston Single Pumps, Size 045/053	Technical Information	11063344	BC00000059en-US
H1 Axial Piston Single Pumps, Size 060/068	Technical Information	11071685	BC00000074en-US
H1 Axial Piston Single Pumps, Size 069/078	Technical Information	11062169	BC00000058en-US
H1 Axial Piston Single Pumps, Size 089/100	Technical Information	11069970	BC00000067en-US
H1 Axial Piston Single Pumps, Size 115/130	Technical Information	11063346	BC00000198en-US
H1 Axial Piston Single Pumps, Size 147/165	Technical Information	11063347	BC00000061en-US
H1 Axial Piston Single Pumps, Size 210/250	Technical Information	L1208737	BC00000207en-US
H1 Axial Piston Single Pumps, Size 045/053	Service Manual	520L0958	AX00000104en-US
H1 Axial Piston Tandem Pumps, Size 045/053	Service Manual	520L0928	AX00000103en-US
H1 Axial Piston Single Pumps, Size 069–165	Service Manual	520L0848	AX00000087en-US

[Data sheets for all pump sizes are available.](#)

Further available literature

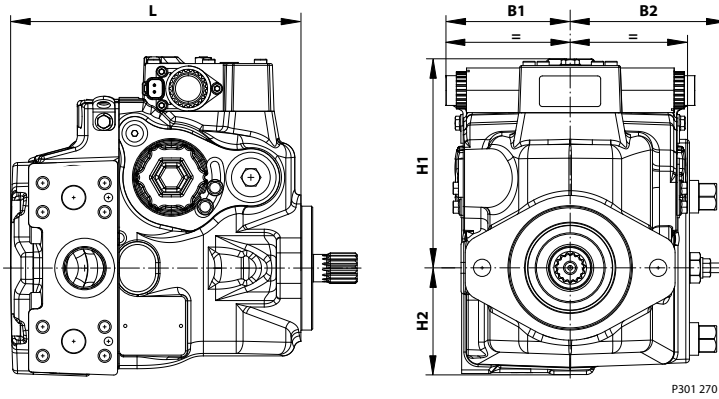
Title	Literature Type	Order number	
		OLD	NEW
H1 Pump Electrical Displacement Control (EDC)	Electrical Installation	11022744	BC00000255en-US
H1 Pump 3-position Electric Control (FNR)	Electrical Installation	11025001	BC00000269en-US
H1 Pump Non-Feedback Prop. Electric (NFPE)	Electrical Installation	11025002	BC00000270en-US
H1 Pump Automotive Control (AC)	Technical Information	L1223856	BC00000213en-US
H1 Automotive on PLUS+1 for MC024	Technical Information	L1120636	BC00000201en-US
Speed and Temperature Sensor	Technical Information	11046759	BC00000047en-US
Pressure Sensor	Technical Information	L1007019	BC00000178en-US
External Remote Charge Pressure Filter	Technical Information	11064579	BC00000064en-US
Design Guideline for Hydraulic Fluid Cleanliness	Technical Information	520L0467	BC00000095en-US

Please see <http://www.powersolutions.danfoss.com/literature/>

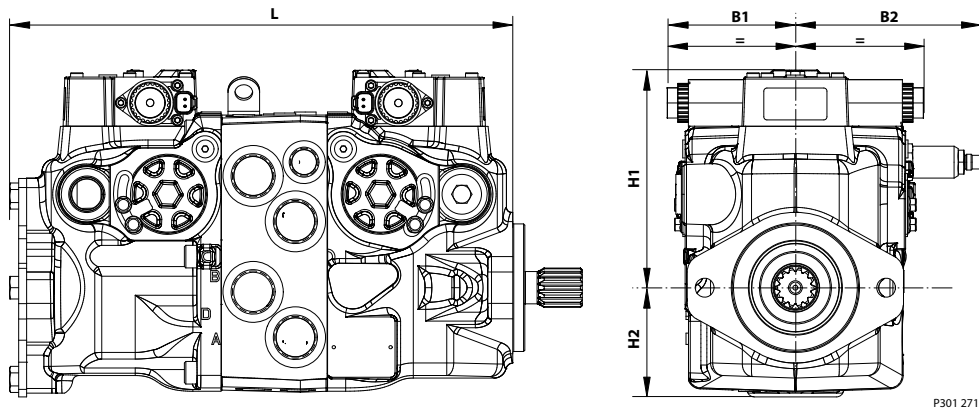
Product Line Overview
H1 Axial Piston Pumps, Single and Tandem

Dimensions

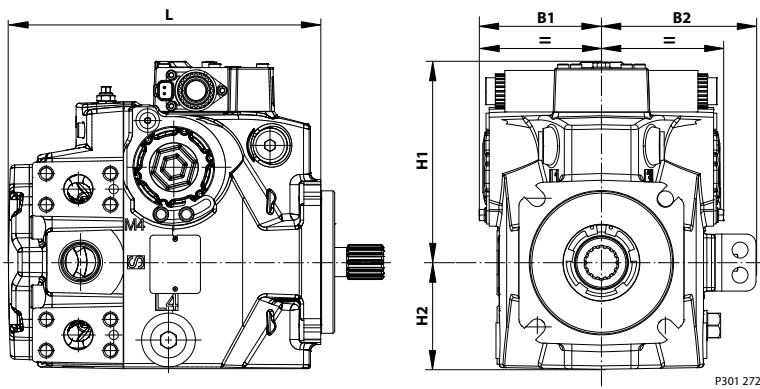
Frame size 045/053 (Single)



Frame size 045/053 (Tandem)



Frame size 060-250 (Single)



Dimensions**H1 pumps dimensions***Dimensions (mm)*

Size	L	B1	B2	H1	H2
045/053 Single	238.2	103.0	129.7	173.3	88.5
045/053 Tandem	405.0	103.0	129.7	173.3	87.0
060/068	255.9	106.0	135.5	173.9	99.4
069/078	278.3	108.9	138.2	178.9	95.0
089/100	295.3	112.4	139.2	187.3	99.0
115/130	316.9	121.9	148.1	204.3	110.0
147/165	333.3	131.9	152.6	208.3	112.0
210/250	418.9	155.0	172.2	245.0	136.0

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Local address:

**Danfoss
Power Solutions (US) Company**
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

**Danfoss
Power Solutions GmbH & Co. OHG**
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

**Danfoss
Power Solutions ApS**
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

**Danfoss
Power Solutions Trading
(Shanghai) Co., Ltd.**
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 3418 5200

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