# Fluid Controls **Gerotor Pump Generation 2**



**Design**The GERO generation 2 gerotor pumps are constant displacement pumps with compact measurements. high cleanness and a robust attribute. The asa gerotor pump generation 2 is a completely new design with trend setting modules to serve for highest flexibility to the actual application, while using the advantages of a standard product at the same time

# Applications

The aluminium body of the housing, the steel shaft and the standard NBR sealings are the perfect match for any mineral oil application. The pump is recommended for lubrication circuits as well as for oil supply, cooling and filtration systems.

# Advantages

Modular design

Our pump design uses the same housing from smallest to largest application. This results a high reliability and the most economic approach on the market.

One of the most sophisticated topics and requirements on a modern hydraulic component is the cleanness. This is therefore the indicator for the ability to save costs and labour time for the designer and the complete system. We are working to the highest standards beyond the usual requirements.

Internal bypass

The internal bypass is a standard option and keeps the same overall measurements.

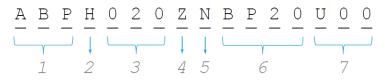
External bypass

For constant flow at over pressure to ensure lubrication & cooling of pump.

The asa rail system an additional option to the conventional SAE 1 ¼" connection on the outlet. The system requires separate connectors which can be turned in 4 different directions and offers an additional G ½" port for any monitoring or other purpose.

# **Pump Order Code**

Pumps



## 1 Product Category

	, (D)	i dilipo			
2	2 Product Series				
	Н	Gerotor Generation 2 for hydraulic use			
3	3 Pump Displacement				
nominal Displ./rotation		Displ./rotation			
	020	1.22 in³			
	030	1.83 in³			
	040	2.44 in <sup>3</sup>			
	060	3.66 in <sup>3</sup>			
	080	4.88 in <sup>3</sup>			

## 4 Type of Connection

Z	SAE B-B 4- hole / SAE J744
М	metric 4-hole / ISO 3019-2

# **General Data**

max. outlet pressure:	145 psi
max. kinematic viscosity:	up to 0,78 in $^2$ /s $^*$ )
oil temperature range	-4°F to 176°F
ambient working temperature range	-4°F to 176°F**)
compatible media	any mineral oil acc. DIN 51524

<sup>\*)</sup> depending on motor power

# 5 Sealing Material

	N	NBK			
6 Bypass Options					
	BP20	internal 29 PSI relief valve			
	BP60	internal 87 PSI relief valve			
	BP99	internal 145 PSI relief valve (standard)			
	EB60	external 87PSI relief valve			
7 Index / Customized					
	1100	0: 1 1110 " "			

### U00 Standard US configuration special / customized specifications; to be Uxx advised by asa

# Materials

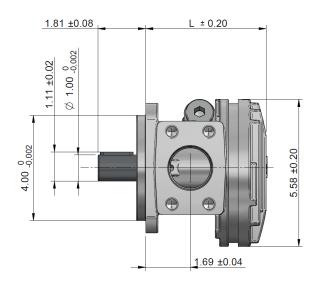
housing and cover	aluminium
shaft	steel
gerotor	steel
sealings	NBR
centering disc	aluminium

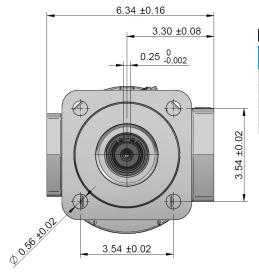
<sup>\*\*)...</sup>consider the maximum ambient temperature of the used electric

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# SAE version

(4-hole flange acc. ISO 3019-1 SAE J744 with cylindrical shaft)





# )imancions

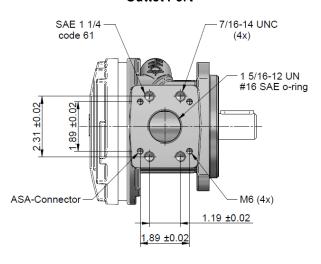
Nominal	L			
size	[inch]			
20	4.61			
30	4.88			
40	5.04			
60	5.47			
80	5.91			

# **Hydraulic connection**

# **Inlet Port**

# 1/2-13 UNC SAE 1 1/2 code 61 (4x)1 5/8-12 UN #20 SAE o-ring 1.41 ±0.02

# **Outlet Port**



# Specific Data

order number	description	displacement	oil flow <sup>1)</sup>	min. required motor power <sup>2)</sup>	weight
		[in³/rotation]	[gpm]	[HP]	[lbs]
ABPH020ZNBP99U00	Gerotor pump 2, 1.22 in³, SAE, int.BP, 145PSI	1,22	7,7	1.78	9.5
ABPH030ZNBP99U00	Gerotor pump 2, 1.95 in³, SAE, int.BP, 145PSI	1,95	12,4	1.78	10.6
ABPH040ZNBP99U00	Gerotor pump 2, 2.44 in³, SAE, int.BP, 145PSI	2,44	15,3	2.41	11.2
ABPH060ZNBP99U00	Gerotor pump 2, 3.66 in³, SAE, int.BP, 145PSI	3,66	23,0	2.41	13.2
ABPH080ZNBP99U00	Gerotor pump 2, 4.88 in³, SAE, int.BP, 145PSI	4,88	29,0	2.41	15.4

<sup>1)...</sup>measured at rotation of 1450rpm, pressure 0,5bar and viscosity of 46mm²/s / for 60Hz oil flow values to be multiplied by 1,2

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# asa

# **Options**

# **Filtration**

We offer an optional spin on filter kit to mount on the outlet port in combination with our hydraulic rail connection system, see below.

spin on filter kit	ILLZRF11U1110U00 (10µm, 16gpm)
BSP ¾"	ILLZRF11U1125U00 (25µm, 16gpm)
	ILLZRF12U1110U00 (10µm, 26gpm)
	ILLZRF12U1125U00 (25µm, 26gpm)
clogging indicator	electric, optical
temperature switches	ILLZTH5069KU00, ILLZTH4765KU00
·	ILLZTH6065KU00

Contact us for complete data sheet of this filter integration system.



For the suction side, you can choose from our connection technology program a flexible rubber compensator with SAE flanges. For the outlet port you can choose any of our rail connectors, with the possibility to turn the port direction at the below given dimensions.

Inlet Port		
SAE rubber compensator NBR/CR, NG 40, SAE 1 ½"		
order number:	SDKSS040U00	
Outlet Port		
optional rail connector order numbers		
90° rail connector UNF 1 1/16"	ILLZET53U12U00	
straight rail connector BSP 1"	ILLZATTS1G25U00	
90° rail connector UN 1 5/16"	ILLZET53U16U00	

Contact us for our complete suction line product program, including adapter flanges and butterfly valves.

# Vibration Absorbers

Using our patented vibration absorbers extends the duration of the pump unit. The unique design has highest capabilities with higher vulcanization surface then conventional products. The shear load capabilities can be maximized by the given arrow system on the product.

50x50x45mm absorber with M10 threads	Extended duration and highest shear loads through our design
	and arrows system on the product.
order number	MDGQ504510IIKU00
50x50x45 M10	

Contact us for full vibration absorber program with load capacities, maximum static loads and spring rates.





This data sheet and the corresponding scale drawings are to be used as a general guideline and technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually, as a assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. Any cooling performances and general technical values indicated in this catalogue are measured at a test bench according to as a testing procedures or calculated, based on such tests. Due to different conditions in testing and application environments the performance may also vary by +/- 15%. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Therefore we recommend all products to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. General tolerances according to DIN ISO 2768-vL. General tolerances for casted parts according EN ISO 8062-3 (DCTG 10). Tolerances for rubber parts are according to ISO 3302-1 (class M4-F+C). The tolerances of welding seams are defined by quality group D according to EN ISO 10042, if it is not specified on the actual scale drawing or data sheet. In addition to that we point out that any data sheet and corresponding scale drawing is no substitution for the manual.

\*\*D-gerotor-pump-generation2-us-revO\*\*

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