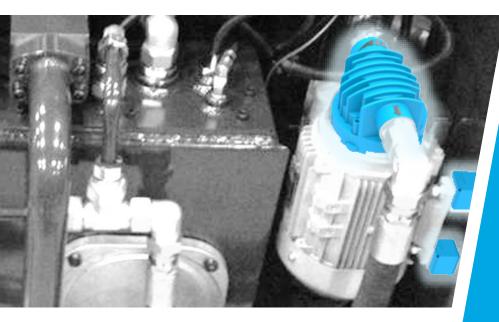


## Fluid Controls

Gerotor Pump Generation 2









be different.
make a difference.

#### 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 use the same housing from smallest to largest application. This results in high reliability and most economic approach in the markets.

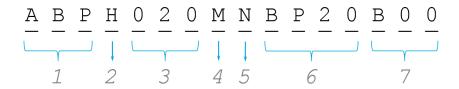
One of the most sophisticated topics and requirements on a modern hydraulic component is the cleanness. This is therefore the indicator for the ability to save costs and labour time for the designer and the complete system. We are working to the highest standards beyond the usual requirements.

#### Internal bypass

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

The asa rail system an additional option to the conventional SAE 1 1/4" connection on the outlet. The system requires separate connectors which can be turned in 4 different directions and offers an additional G 1/2" port for any monitoring or other purpose.

#### **Pump Order Code**



#### 1 Product Category

ABP	Pumps								
2 Product Series									
Н	Gerotor Generation 2 for hydraulic use								
3 Pump Dis	placement								
nominal	Displ./rotation								
20	21,6 cm³								
30	34,2 cm³								
40	41,4 cm³								
60	61,3 cm³								

#### 4 Type of Connection

M	1	metric 4-hole / ISO 3019-2					
Z		SAE B-B 4- hole / SAE J744					
5 S	Sealing M	aterial					
Ν		NBR					
6 I	internal B	Bypass					
В	P20	2 bar relief pressure					
В	P60	6 bar relief pressure					
В	P99	10 bar relief pressure (standard)					
7 T	7 Index / Customized						

#### 7 Index / Customized

B00 special / customized specifications; to b advised by asa	е
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#### **General Data**

81 cm<sup>3</sup>

80

max. negative inlet pressure:	-0,5 bar to 0 bar
max. outlet pressure:	10 bar (relative)
max. kinematic viscosity:	up to 500 mm²/s *)
oil temperature range	-20°C to +80°C
ambient working temperature range	-20°C to +80°C**)
compatible media	any mineral oil acc. DIN 51524

#### \*) depending on motor power

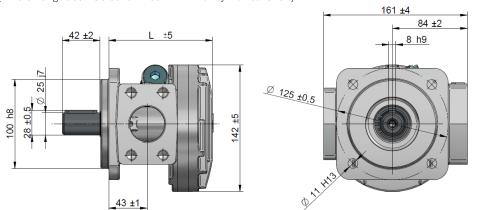
#### Materials

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

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

#### **Metric version**

(4-hole flange acc. ISO 3019-2 100B4HW with cylindrical shaft)



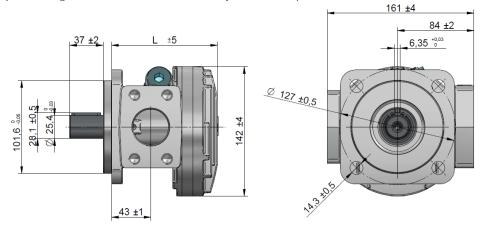
# asa

#### **Dimensions**

Normal	L
size	[mm]
20	117
30	124
40	128
60	139
80	150

#### **SAE** version

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

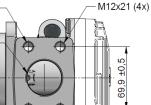


#### **Hydraulic connection**

SAE 1 1/2"

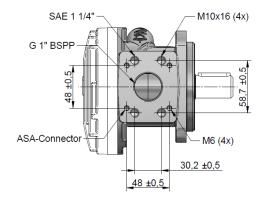
G 1 1/4"BSPP

#### **Inlet Port**



35,7 ±0,5

#### **Outlet Port**



#### **Specific Data**

-p					
order number	description	displacement	oil flow <sup>1)</sup>	min. required motor power <sup>2)</sup>	weight
		[cm³/rotation]	[l/min]	[kW]	[kg]
ABPH020MNBP20	Gerotor pump 2, 20cm³ / metric	21,6	28	1,1	4,9
ABPH030MNBP20	Gerotor pump 2, 30cm³ / metric	34,2	44	1,1	5,4
ABPH040MNBP20	Gerotor pump 2, 40cm³ / metric	41,4	54	1,5	6,1
ABPH060MNBP20	Gerotor pump 2, 60cm³ / metric	61,3	80	1,5	7,2
ABPH080MNBP20	Gerotor pump 2, 80cm³ / metric	81	105	1,5	8,4

<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

<sup>2)...</sup>check page 6 for max.pressure and viscosity

## Fluid Controls **Gerotor Pump Generation 2** Motor / Pump Unit

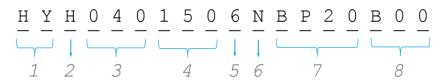


Out motor / pump units are a simplified option for you to the best practice configuration with highest versatility to the possible applications. It consists of a configured gerotor pump, bell housing and electric motor. The high quality components are in line with the pump concept. The motor/pump unit can be used as autonomous circulation power pack.

Saving space and highest cost efficiency are the most important characteristics for the available configurations.

Contact us in case of questions and for any special requirements, so we can offer our support to select the optimal product.

#### **Pump Order Code**



1 Product Category								
HY motor/pump unit	HY motor/pump unit							
2 Product Series								
H gerotor generation 2 for hydraulic use								
3 Pump Displacement								
nominal Displ./rotation								
20 21,6 cm <sup>3</sup>								
30 34,2 cm³								
40 41,4 cm³								
60 61,3 cm <sup>3</sup>								
80 81 cm <sup>3</sup>								
4 Motor power								
110 1,10 kW								
150 1,50 kW								
220 2,20 kW								
300 3,00 kW								
400 4,00 kW								

#### 5 No. of Poles

	4	4-pole motor						
	6	6-pole motor						
6	Sealing M	aterial						
	N	NBR						
7	'Internal B	Bypass						
	BP20	2 bar relief pressure						
	BP60	6 bar relief pressure						
	BP99	10 bar relief pressure (standard)						
8	8 Index / Customized							

B00 special / customized specificati advised by asa	ons; to be
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#### **General Data**

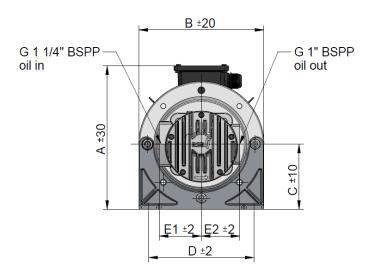
	frequency	50Hz				
	voltage	230/400V				
	protection	IP 55				
	efficiency electric motor	IE3				
Mate	rials					
	pump	aluminium				
	flexible coupling	aluminium/polyurethan				
	bell housing	aluminium				
	feet	aluminium				
Work	king Range					
	ambient temperature	-15°C to +40°C				
	suction side	-0,5 to 0 bar				
	max. oil temperature	80°C				
	fluids	mineral oil acc .DIN51524				

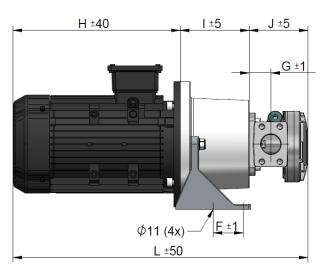


This data sheet and the corresponding scale drawings are to be used as a general guideline and technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually, as a assumes no liability for any information therein, any errors, omissions, missions, my 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 procedure, so as testing procedures or 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 150 2768-vL, General tolerances for casted parts according EN ISO 8062-3 (DCTG 10). Tolerances for rubber parts are according to ISO 3002-1 (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.

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#### **Dimensions**

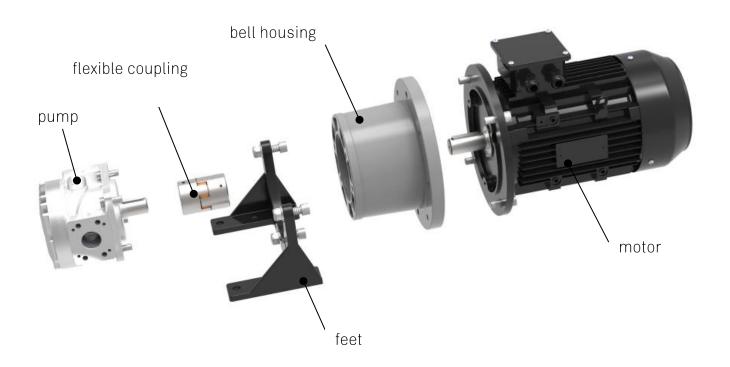
order number	А	В	С	D	E1	E2	F	G	Н	I	J	L	weight
	[mm]	[kg]											
HYH0201106NBP99	250	200	112	180	84	77	60	43	265	126	117	490	27
HYH0201506NBP99	286	250	130	220	84	77	60	43	314	136	117	570	38
HYH0201504NBP99	250	200	112	180	84	77	60	43	290	126	117	513	27
HYH0202204NBP99	286	250	130	220	84	77	60	43	314	136	117	570	35
HYH0301106NBP99	250	200	112	180	84	77	60	43	290	126	124	495	26
HYH0301506NBP99	286	250	130	220	84	77	60	43	314	136	124	575	38
HYH0301504NBP99	250	200	112	180	84	77	60	43	290	126	124	518	27
HYH0302204NBP99	286	250	130	220	84	77	60	43	314	136	124	575	34
HYH0401506NBP99	286	250	130	220	84	77	60	43	314	136	128	580	39
HYH0402204NBP99	286	250	130	220	84	77	60	43	314	136	128	580	35
HYH0403004NBP99	286	250	130	220	84	77	60	43	314	136	128	580	40
HYH0601506NBP99	286	250	130	220	84	77	60	43	314	136	139	590	40
HYH0602206NBP99	304	250	130	220	84	77	60	43	335	136	139	610	43
HYH0602204NBP99	286	250	130	220	84	77	60	43	314	136	139	590	36
HYH0603004NBP99	286	250	130	220	84	77	60	43	314	136	139	590	41
HYH0604004NBP99	304	250	130	220	84	77	60	43	335	136	139	610	49
HYH0801506NBP99	286	250	130	220	84	77	60	43	314	136	150	600	42
HYH0802206NBP99	304	250	130	220	84	77	60	43	335	136	150	620	45
HYH0802204NBP99	286	250	130	220	84	77	60	43	314	136	150	600	43
HYH0803004NBP99	286	250	130	220	84	77	60	43	314	136	150	600	43



#### **Technical Data**

order number	description	motor power	motor size	poles	oil flow	max. pressure	max. viscosity	noise level
		[kW]	IEC		[lpm]	[bar]	[cSt]	[dB(A)]
HYH0201106NBP99	Gero pump unit 50Hz 20cm³ 1,1kW 6-pol. BP	1,10	90L	6	18	8	150	62
HYH0201506NBP99	Gero pump unit 50Hz 20cm³ 1,5kW 6-pol. BP	1,50	100L	6	18	8	250	62
HYH0201504NBP99	Gero pump unit 50Hz 20cm³ 1,5kW 4-pol. BP	1,50	90L	4	28	10	250	62
HYH0202204NBP99	Gero pump unit 50Hz 20cm³ 2,2kW 4-pol. BP	2,20	100L	4	28	10	500	62
HYH0301106NBP99	Gero pump unit 50Hz 30cm³ 1,1kW 6-pol. BP	1,10	90L	6	29	8	150	64
HYH0301506NBP99	Gero pump unit 50Hz 30cm³ 1,5kW 6-pol. BP	1,50	100L	6	29	8	250	64
HYH0301504NBP99	Gero pump unit 50Hz 30cm³ 1,5kW 4-pol. BP	1,50	90L	4	44	10	250	64
HYH0302204NBP99	Gero pump unit 50Hz 30cm³ 2,2kW 4-pol. BP	2,20	100L	4	44	10	500	64
HYH0401506NBP99	Gero pump unit 50Hz 40cm³ 1,5kW 6-pol. BP	1,50	100L	6	35	8	250	66
HYH0402204NBP99	Gero pump unit 50Hz 40cm³ 2,2kW 4-pol. BP	2,20	100L	4	54	10	250	66
HYH0403004NBP99	Gero pump unit 50Hz 40cm³ 3,0kW 4-pol. BP	3,00	100L	4	54	10	500	66
HYH0601506NBP99	Gero pump unit 50Hz 60cm³ 1,5kW 6-pol. BP	1,50	100L	6	52	8	250	68
HYH0602206NBP99	Gero pump unit 50Hz 60cm³ 2,2kW 6-pol. BP	2,20	112M	6	52	8	250	68
HYH0602204NBP99	Gero pump unit 50Hz 60cm³ 2,2kW 4-pol. BP	2,20	100L	4	80	10	150	68
HYH0603004NBP99	Gero pump unit 50Hz 60cm³ 3,0kW 4-pol. BP	3,00	100L	4	80	10	250	68
HYH0604004NBP99	Gero pump unit 50Hz 60cm³ 4,0kW 4-pol. BP	4,00	112M	4	80	10	500	68
HYH0801506NBP99	Gero pump unit 50Hz 80cm³ 1,5kW 6-pol. BP	1,50	100L	6	69	8	150	69
HYH0802206NBP99	Gero pump unit 50Hz 80cm³ 2,2kW 6-pol. BP	2,20	112M	6	69	8	250	69
HYH0802204NBP99	Gero pump unit 50Hz 80cm³ 2,2kW 4-pol. BP	2,20	100L	4	105	10	250	69
HYH0803004NBP99	Gero pump unit 50Hz 80cm³ 3,0kW 4-pol. BP	3,00	100L	4	105	10	500	69

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



#### **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	ILLZRF11G2010 (10μm, 60lpm)
BSP ¾"	ILLZRF11G2025 (25µm, 60lpm)
	ILLZRF12G2010 (10µm, 100lpm)
	ILLZRF12G2025 (25μm, 100lpm)
clogging indicator	electric, optical
temperature switches	ILLZTH5069K, ILLZTH4765K
	ILLZTH6065K

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



#### **Hydraulic connection**

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 NBF	R/CR, NG 40, SAE 1 ½"			
order number:	SDKSS040			
Outlet Port				
optional rail connector order numbers				
90° rail connector BSP 1"	ILLZATT53G25			
straight rail connector BSP	ILLZATTS1G25			
1"				
90° rail connector BSP 1 ¼"	ILLZATT53G32			

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



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.

Extended duration and highest 50x50x45mm absorber with M10 threads shear loads through our design and arrows system on the product. MDGQ504510IIK order number 50x50x45 M10

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

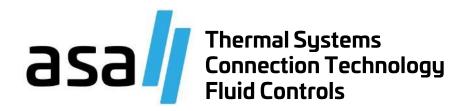


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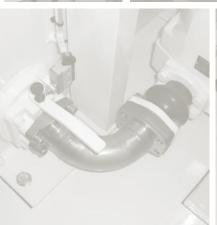


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