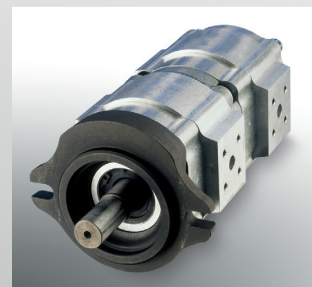
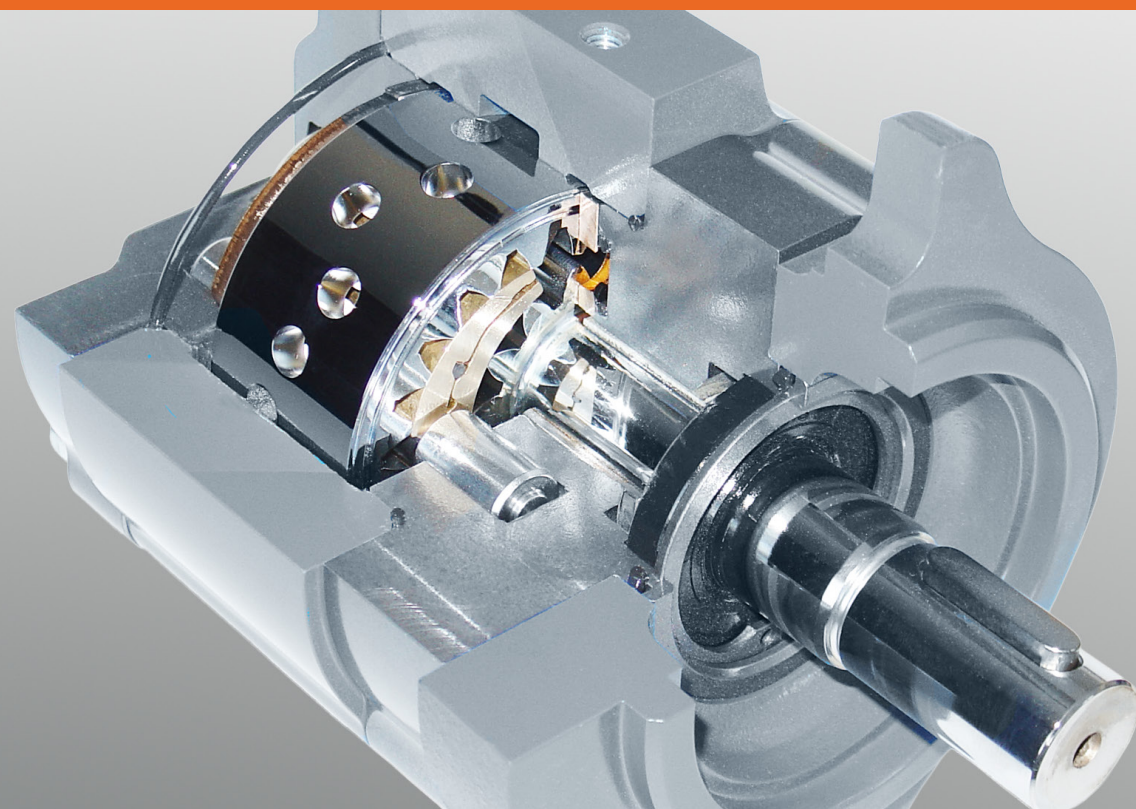


Industrial Components

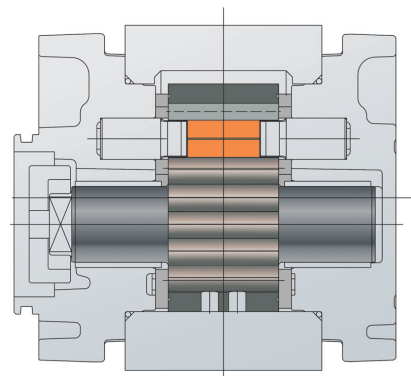
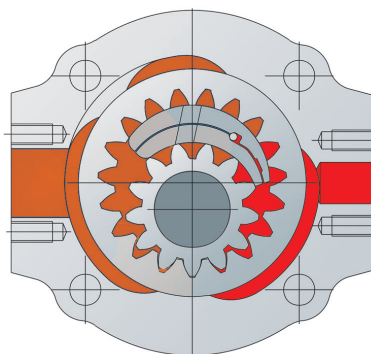
Internal gear pumps
DHPS2



Internal gear pump Type DHPS2 with constant displacement volume

Characteristics

- Internal gear pump with axial and radial gap compensation
- Radial compensation with segments
- Pressure cover
- Field of application:
Mobile hydraulic systems, e.g. for fork lifts, light industrial hydraulic applications
- Direct fixture
- Low noise
- Long time life
- Low pulsation (pressure pulsation ~ 2%)



Technical Data:

Rated Size	005	006	008	011	013	016	019	022	025
Spec. volume Vth [cm³/rev]**	5,4	6,4	7,9	10,9	13,3	15,8	19,3	22,2	25,2
Continuous operating pressure [bar]	250								
Peak operating pressure [bar] max. 10 sec. 15% duty cycle	320						300		280
Cut-in pressure peak 100 ms [bar]	350						325		300
Nominal speed [min ⁻¹]	200 – 4.000			200 – 3.600			100 – 3.000		
Max. speed [min ⁻¹]	4.200			4.000			3.600		
Operating viscosity [mm²/s]	10 – 300								
Starting viscosity [mm²/s]	2.000								
Operating temperature [°C]	-20 to +100								
Operating medium	HL – HLP DIN 51 524 Teil 1/2								
Max. medium temperature [°C]	120								
Min. medium temperature [°C]	-40								
Max. ambient temperature [°C]	80								
Min. ambient temperature [°C]	-40								
Max. admission pressure (intake side) [bar]	2 bar absolute								
Min. admission pressure (intake side) [bar]	0,8 bar absolute (start 0,6)								
Weight appr. [kg]	2,9	3,0	3,1	3,3	3,5	3,6	3,8	4,0	4,2
Degree of filtration	Class 20/18/15 due to ISO 4406								
Life expectancy	not less than 1 x 10 ⁶ load cycles against peak operating pressure								
Efficiency η vol [%]	91	92	93		94		95		
Efficiency η hm [%]	90		91	92		93			
Pump noise* (measured in sound chamber) dB[A]	55	56	58	59	60	61	62	63	64

n = 1.450 min⁻¹ Δ p = 250 bar T = 50 °C Medium: HLP 46

* Measured in anechoic room; Axial microphone distance 1.0 m

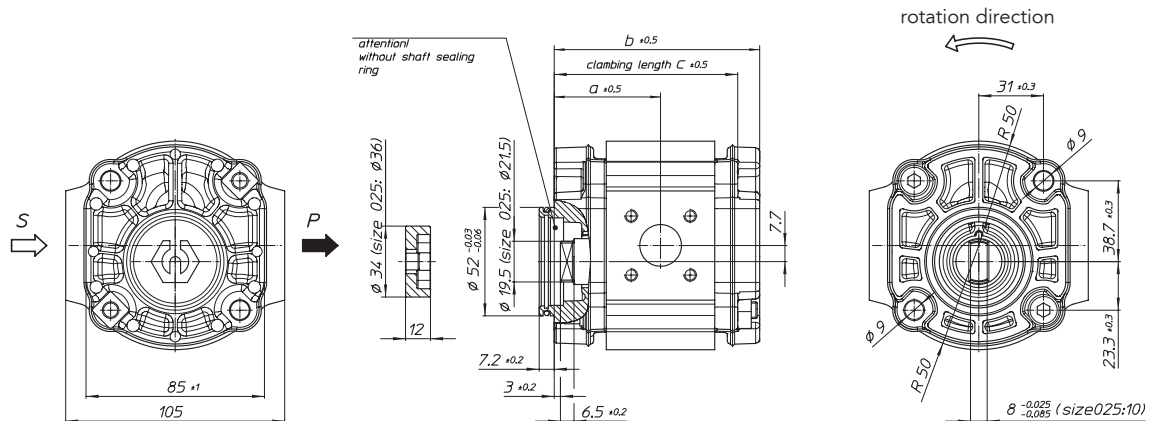
** Due to manufacturing tolerances the displacement volume could vary

The pumps have no corrosion protection. The max. permissible values must not be applied cumulatively. Please contact us.

Pump with oldham coupling

Order example: DHPS2 - __-LD34-1X

Size	a	b	c
005	43	82,5	72
006	44	84,5	74
008	45,5	87,5	77
011	48,5	93,5	83
013	51	98,5	88
016	53,5	103,5	93
019	57	110,5	100
022	60	116,5	106
025	63	122,5	112



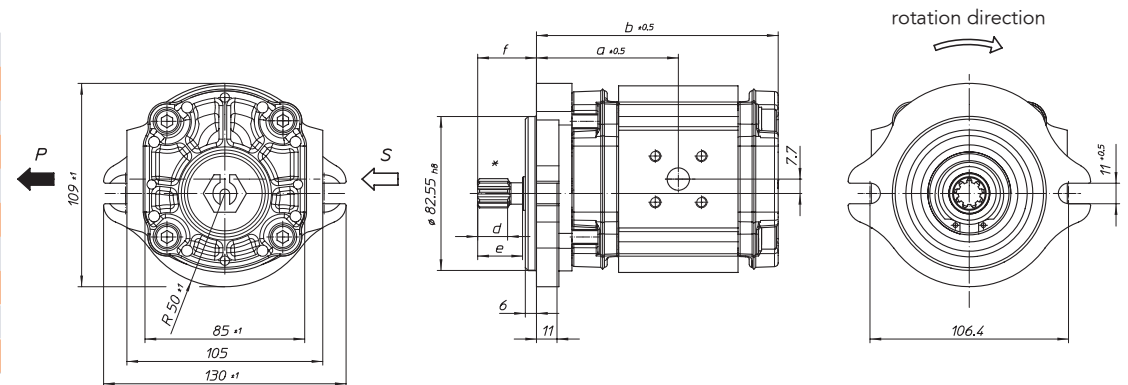
Coupling included in scope of delivery.

Provide M8 DIN 912 fastening screws with DIN 433 plain washer, tightening torque $M=25+5 \text{ Nm}$

Pump with SAE-A-2-hole flange and splined shaft

Order example: DHPS2 - __-__RB04-1X

Size	a	b	d	e	f
005	62	101,5	16	24	31,5
006	63	103,5	16	24	31,5
008	64,5	106,5	16	24	31,5
011	67,5	112,5	16	24	31,5
013	70	117,5	16	24	31,5
016	72,5	122,5	16	24	31,5
019	76	129,5	16	24	31,5
022	79	135,5	22	33	40,9
025	82	141,5	22	33	40,9

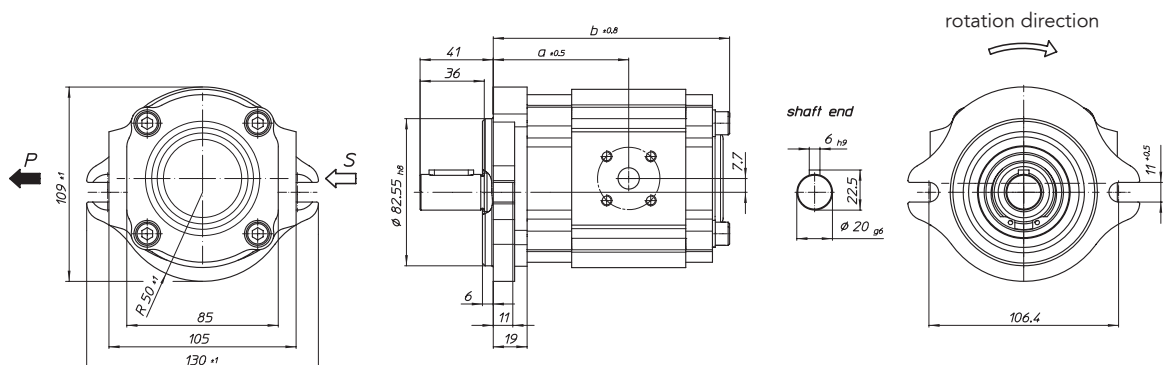


* *Size 005-019: spline ANSI B92.1 - 1996
16/32 DP30° x 9T flatroot side fit*
*Size 022 and 025: spline ANSI B92.1 - 1996
16/32 DP30° x 13T flatroot side fit*

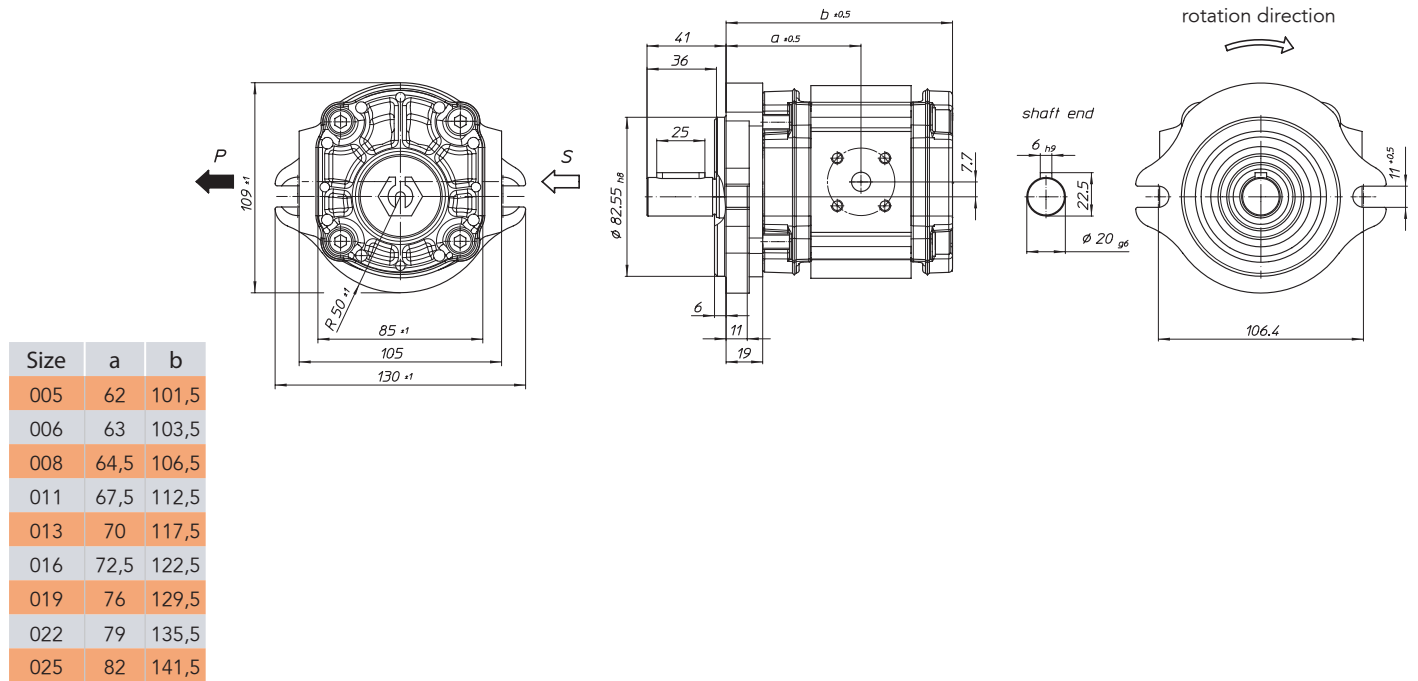
Pump with SAE-A-2-hole flange and cylindrical shaft

Order example: DHPS2 - ____ RA04-1X S111

Size	a	b
005	62	104,5
006	63	106,5
008	64,5	109,5
011	67,5	115,5
013	70	120,5
016	72,5	125,5
019	76	132,5
022	79	138,5
025	82	144,5

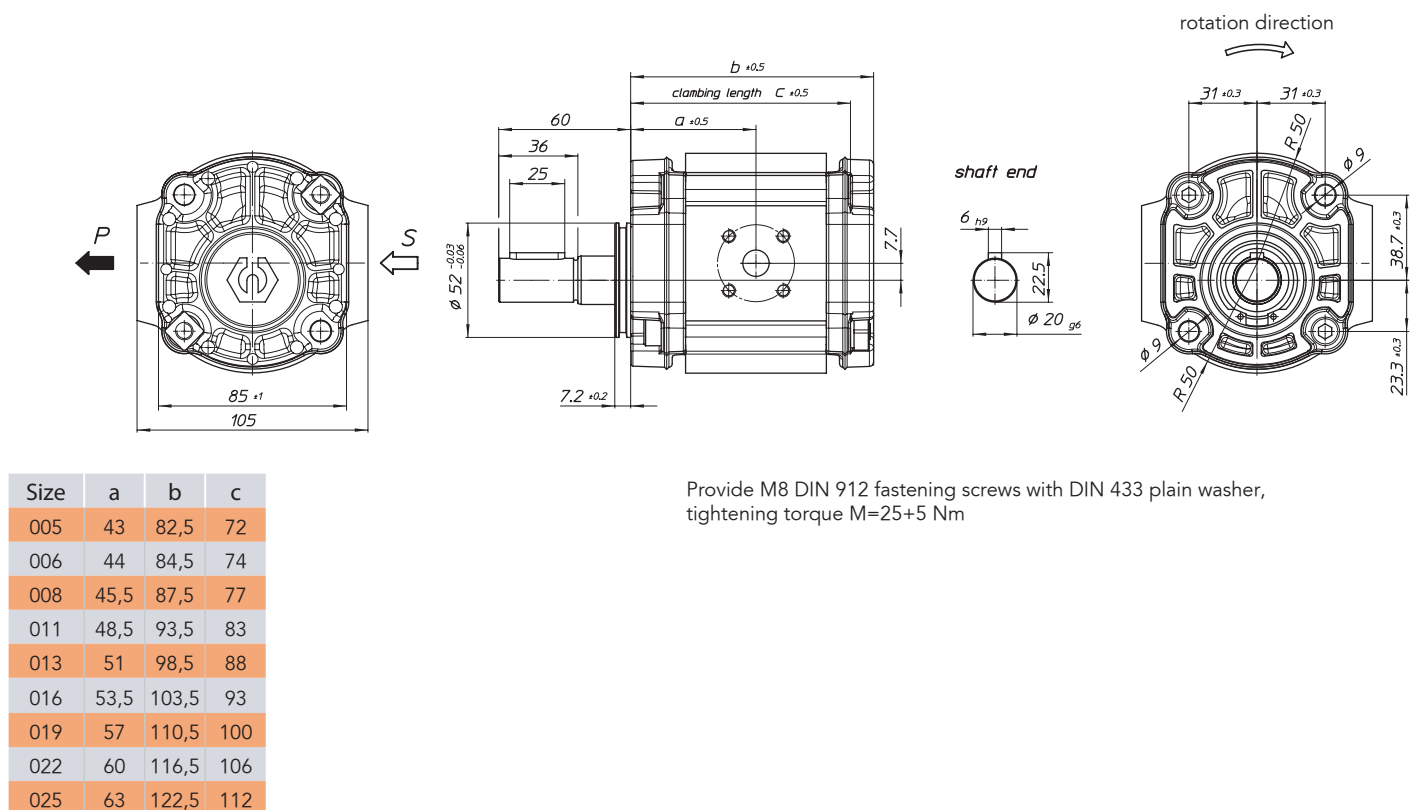


Pump with SAE-A-2-hole flange and cylindrical shaft
Order example: DHPS2 - ___RA04-1X



SAE-B flange on request

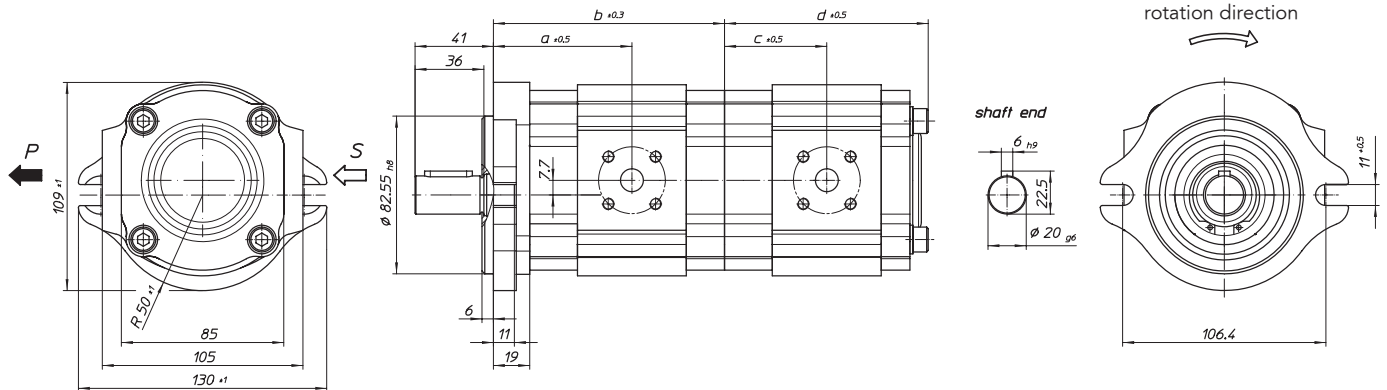
Pump with cylindrical shaft
Order example: DHPS2 - ___RA34-1X



Dimensions DHPS2

Double pump with SAE-2-hole flange and cylindrical shaft

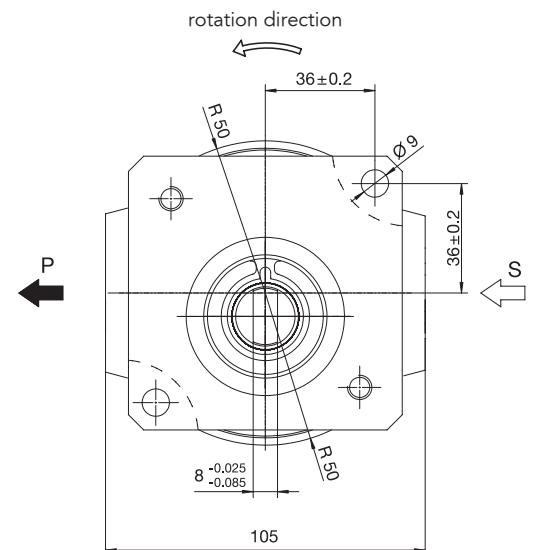
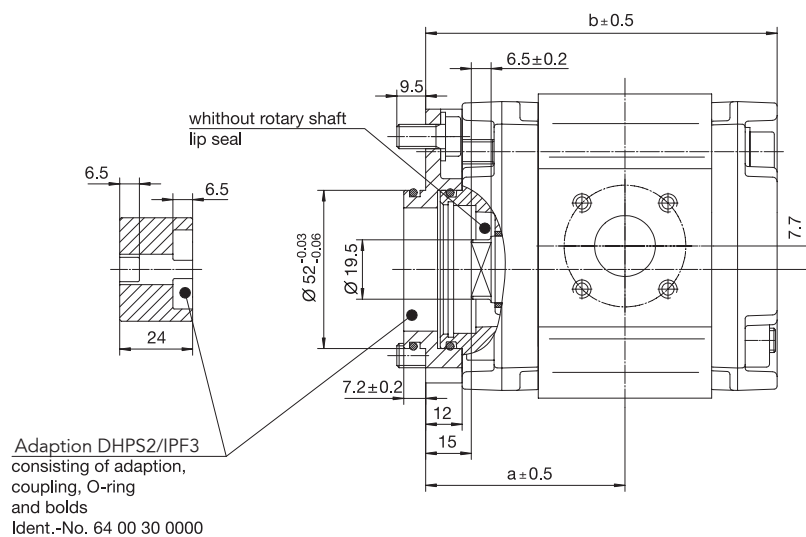
Order example: DHPS2 - ____RK04-1X S111 und DHPS2 - ____RK34-1X S111



Size	a	b	c	d
005	62	100	43	85,5
006	63	102	44	87,5
008	64,5	105	45,5	90,5
011	67,5	111	48,5	96,5
013	70	116	51	101,5
016	72,5	121	53,5	106,5
019	76	128	57	113,5
022	79	134	60	119,5
025	82	140	63	125,5

Pump with adaption, bold pattern of former Eckerle IPF 3 pumps

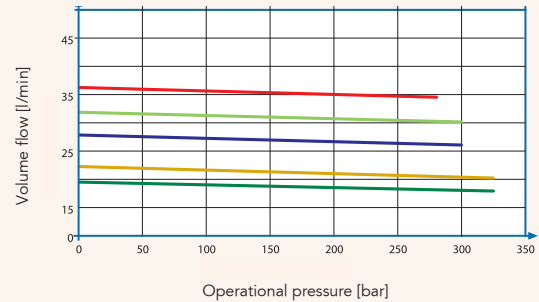
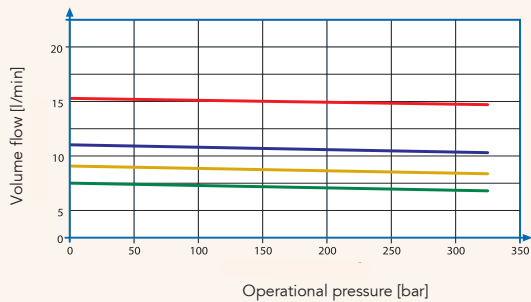
Order example: DHP52 - ____LD34-1X S112



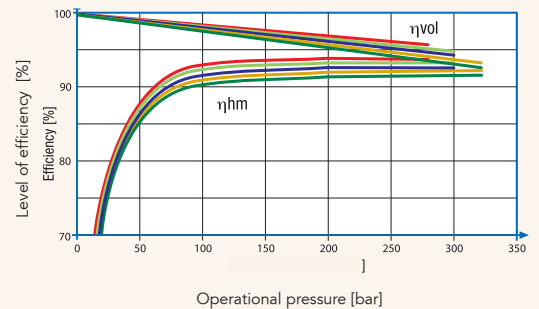
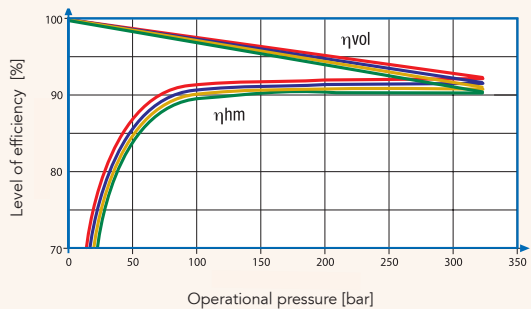
Size	a	b
011	60,5	105,5
013	63	110,5
016	65,5	115,5
019	69	122,5
022	72	128,5

Characteristics DHPS2

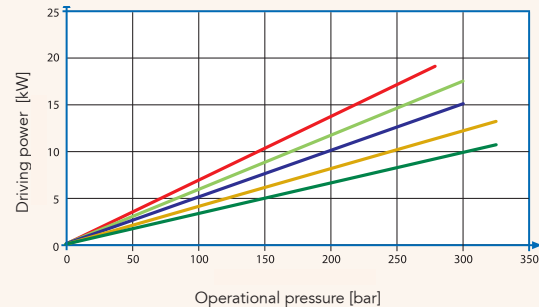
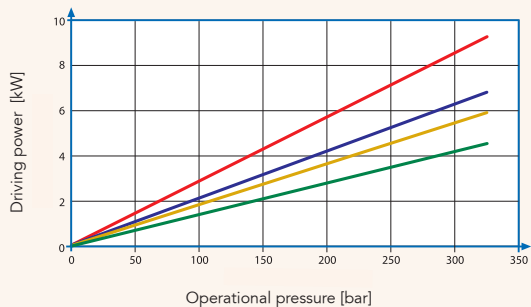
Volume flow



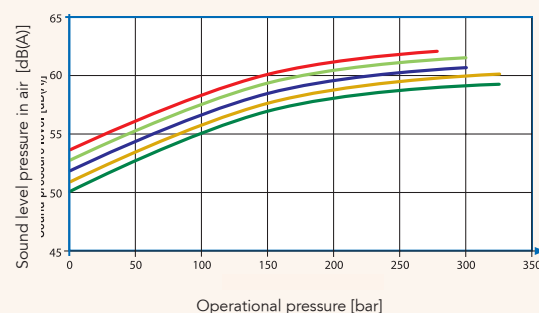
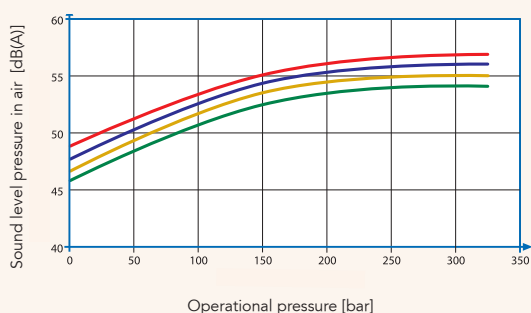
Level of efficiency



Driving power



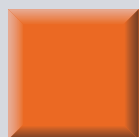
Sound level pressure in air



Measurement conditions: Speed 1450 rpm, viscosity 46 mm²/sec., operating temperature 40 °C, Sound pressure measured in low-reflection anechoic room in accordance with DIN 45 635 sheet 26; Microphone distance 1.0 m axial.

All indicated data serve alone the product description and are not as characteristics in the legal sense to be understood. Subject to alterations.

[illegible]

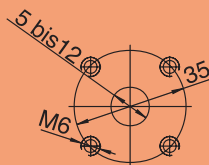
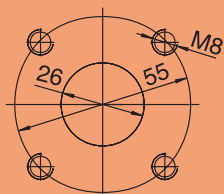


Intake and outlet connections

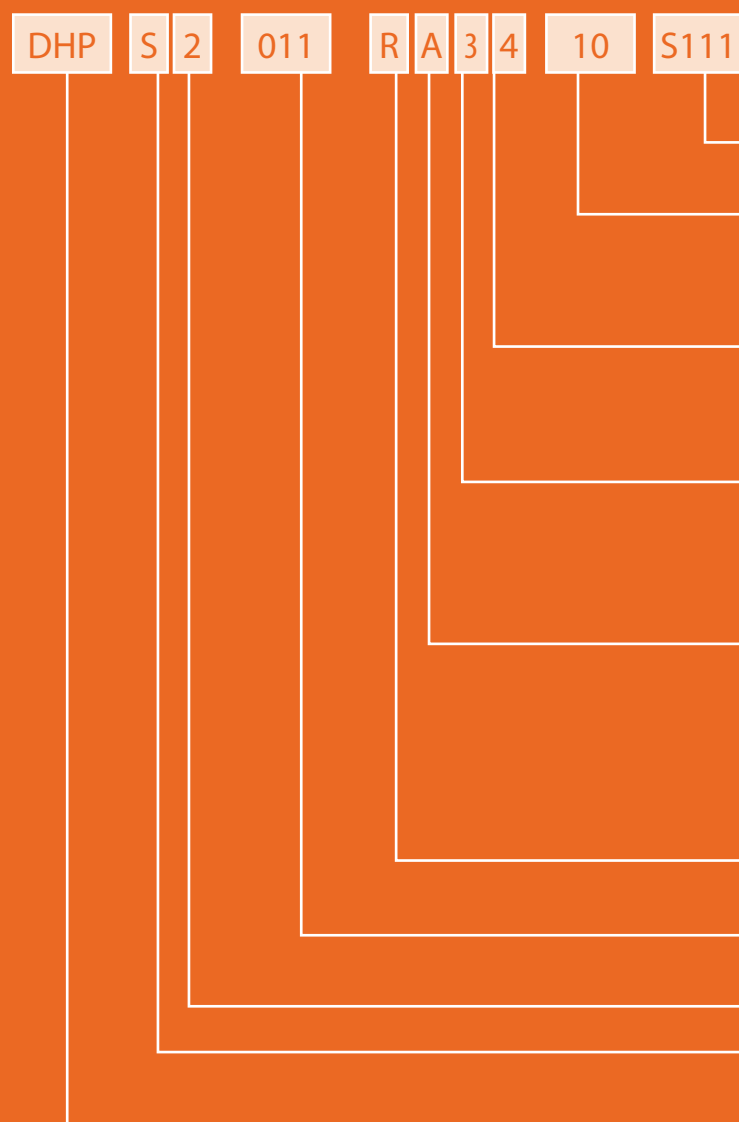
Intake connection
NG 005–016

NG 019–025

Outlet connection
NG 006–025



Thread depth M6 and M8 = 12 mm
All dimensions stated in mm
– other connections on request –



Order example: DHPS2 - 005 LD34 - 1X

Segmental pump overall size 2 with 5.4 cm³/rev., anti-clockwise rotation, two-flange engagement, direct fixture, square flange connection, revision code 10