

Features

- High volumetric efficiency
- Self-priming and venting
- Low pulsation
- Low noise level
- Specially suitable for demanding applications with continuous pressures up to 1000 bar

Radial piston pumps	Type BRK
up to 1000 bar	up to 8,14 cm³/rev



The valve controlled radial pump is of modular construction and can be supplied with 3, 5, 7 or 9 pistons per bank.

Multi outlet, other displacements, pressure- or revolution ranges on request. Combination with gear pumps as per separate data sheet for BKP.

Technical data

Hydraulic fluid	mineral oil according to DIN 51524 (other fluids on request)		
Fluid temperature range	NBR: -30 to 80 °C FPM: -20 to 80 °C		
Ambient temperature range	-30 to 50 °C		
Viscosity range	5 to 220 mm ² /s (optimal: 15 - 35)		
Operating pressure at suction port	-0,2 to 0,5 bar gauge pressure		
Filtration	according to NAS 1638 class 8 or ISO/DIN 4406 16/14/12		
Material	pressure flange	1000 bar	steel
		700 bar	cast steel
	driving shaft		steel
	cover		cast alu.
Weight	see table		
Installation position	any		
Radial force / Axial force onto driving shaft	not allowed		
Direction of rotation	any		
Suction height	max. 500 mm		

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Calculation of driving motor power

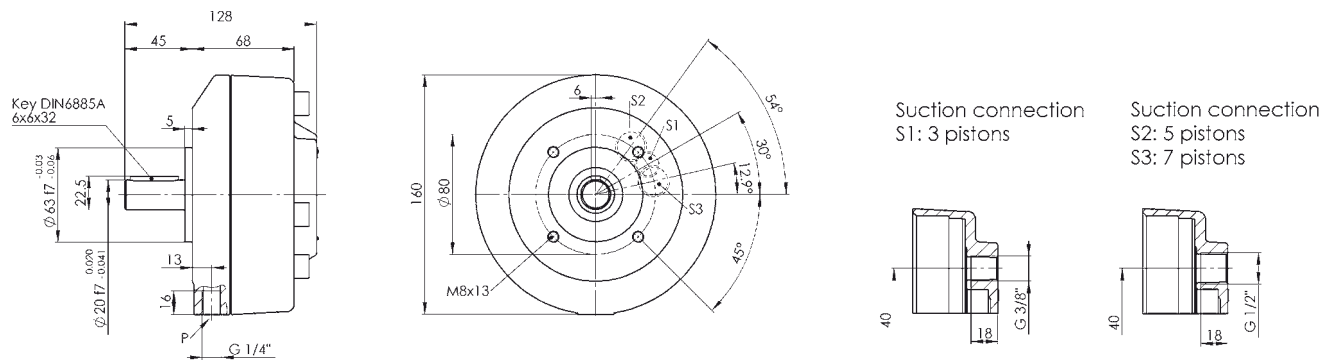
$$P = \frac{p \cdot V_g \cdot n \cdot k}{\eta_t \cdot 600 \cdot 10^3}$$

P = Driving power [kW]
p = Operating pressure [bar]
V_g = Displacement [cm³/rev]
n = Speed [rpm]
η_t = Overall efficiency approx. 0,9

k = Pulsation factor
 - with 3 pistons: k approx. 1,05
 - with 5 pistons: k approx. 1,0
 - with 7 pistons: k approx. 1,0
 - with 9 pistons: k approx. 1,0

Dimension drawing 1 size 11 up to 700 bar

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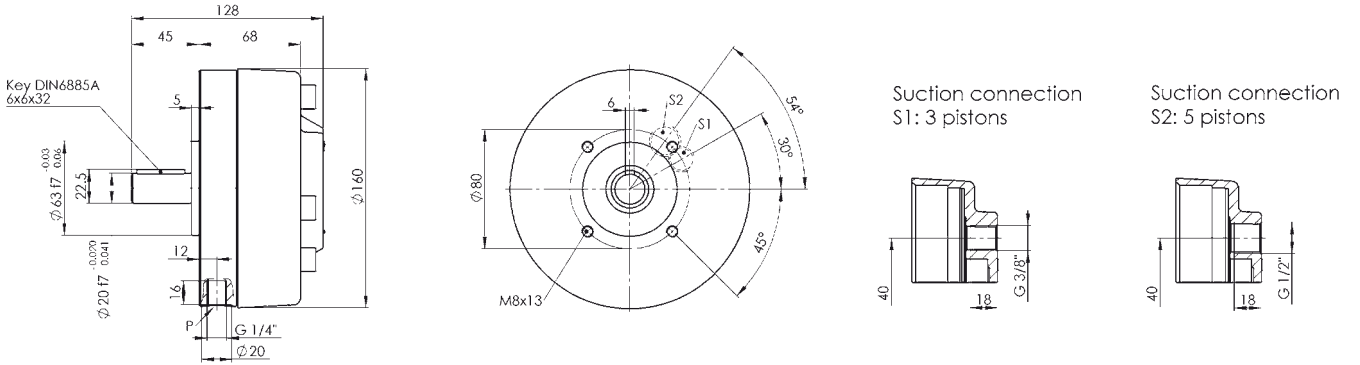
**Radial piston pumps BRK size 11 (dimension drawing 1) up to 700 bar**

Displacement [cm ³ /rev]	Operating pressure max. [bar]	Number of pistons	Speed max. [rpm]	Weight [kg]	Article no. [NBR]	Article no. [FPM]
0.47	700	3	2000	5,6	69635	69635.01
0.68	700	3	2000	5,6	69636	69636.01
0.79	700	5	2000	6,2	69637	69637.01
1.03	700	3	2000	5,6	69638	69638.01
1.10	700	7	2000	6,7	69639	69639.01
1.13	700	5	2000	6,2	69640	69640.01
1.21	700	3	2000	5,6	69641	69641.01
1.53	700	3	2000	5,6	64580	64580.01
1.58	700	7	2000	6,7	69643	69643.01
1.66	700	3	2000	5,6	68623	68623.01
1.88	700	3	2000	5,6	64587	64587.01
2.01	700	5	2000	6,2	64582	64582.01
2.54	700	5	2000	6,2	64589	64589.01
2.71	700	3	2000	5,6	64588	64588.01
2.81	700	7	2000	6,7	64584	64584.01
3.14	700	5	2000	6,2	64593	64593.01
3.56	650	7	2000	6,7	64591	64591.01
4.40	500	7	2000	6,7	64595	64595.01
4.52	500	5	2000	6,2	64594	64594.01
6.33	350	7	2000	6,7	64596	64596.01

Radial piston pumps	Type BRK
up to 1000 bar	up to 8,14 cm³/rev

Dimension drawing 2 size 11 up to 1000 bar

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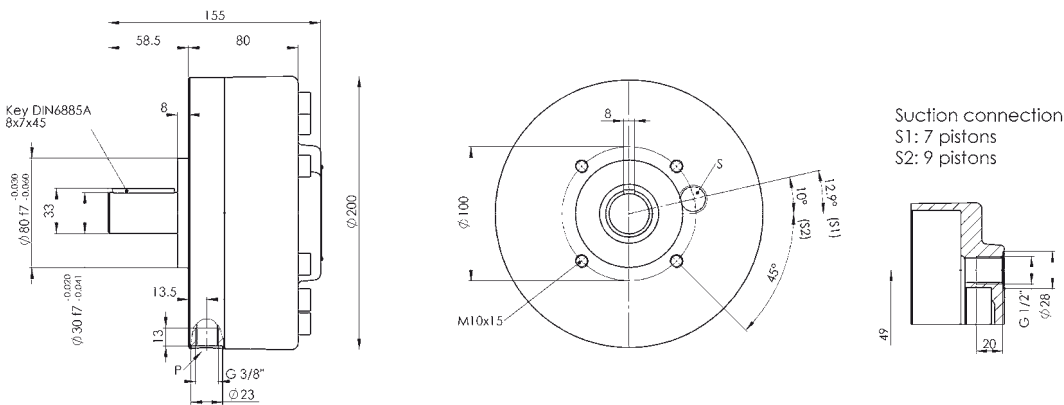


Radial piston pumps BRK size 11 (dimension drawing 2) up to 1000 bar

Displacement [cm ³ /rev]	Operating pressure max. [bar]	Number of pistons	Speed max. [rpm]	Weight [kg]	Article no. [NBR]	Article no. [FPM]
0.47	1000	3	2000	7	69681	69681.01
0.68	1000	3	2000	7	69682	69682.01
0.79	1000	5	2000	7.5	69691	69691.01
1.13	1000	5	2000	7.5	69692	69692.01
1.21	1000	3	2000	7	64581	64581.01
1.53	1000	3	2000	7	64590	64590.01
1.88	900	3	2000	7	64597	64597.01
2.01	1000	5	2000	7.5	64583	64583.01
2.54	900	5	2000	7.5	64592	64592.01
2.71	850	5	2000	7.5	69683	69683.01

Dimension drawing 3 size 12 up to 1000 bar

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Radial piston pumps BRK size 12 (dimension drawing 3) up to 1000 bar

Displacement [cm ³ /rev]	Operating pressure max. [bar]	Number of pistons	Speed max. [rpm]	Weight [kg]	Article no. [NBR]	Article no. [FPM]
1.10	1000	7	2000	12.5	69704	69704.01
1.58	1000	7	2000	12.5	69705	69705.01
2.81	1000	7	2000	12.5	69706	69706.01
3.56	1000	7	2000	12.5	64585	64585.01
4.40	900	7	2000	12.5	64616	64616.01
5.65	700	9	2000	12.5	69874	69874.01
6.33	650	7	2000	12.5	64617	64617.01
8.14	500	9	2000	12.5	69878	69878.01

Radial piston pumps	Type BRK
up to 1000 bar	up to 8,14 cm³/rev

Ordering code: Example

BRK	11	-	0,47	-	1000	-	P	-			00
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Radial piston pump

Size

Displacement [cm³/rev]

Operating pressure max. [bar]

Seals P (NBR)
 V (FPM)

Special design

01 ... 99
 (00 for standard)

Part index

Please leave it blank
 (small letters a-z;
 different letters do
 not effect
 interchangeability)

Design revision

see dimension drawings
 (capital letters A-Z; identical
 letters equal same connecting
 dimensions)

As we are constantly improving our products,
 Bieri reserves the right to make changes to the
 technical specification without prior notice.

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