

Special Radial piston pump

Type SRK-ATEX

700 bar
0,24 up to 8,14 cm³/rev

Features

- High volumetric efficiency
- Self-priming and venting
- Low pulsation
- Low noise level



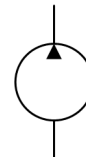
CE  II 2Gc Ex h IIC T4 Gb
Atex

Applications

- Specially designed for demanding applications with continuous pressures up to 700 bar → long economic lifetime!
- Test stands
- Explosion-prone hydraulic constructions (according ATEX standard)
- Installation outside of oil reservoir possible

Design

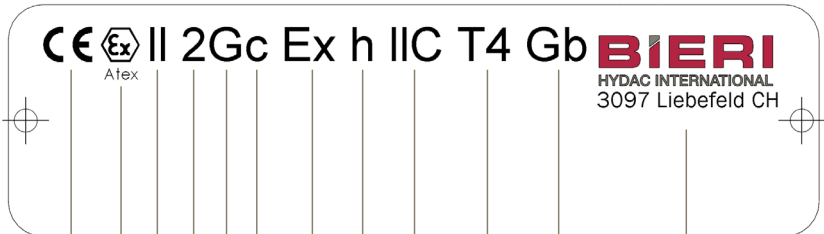
- Radial piston pump of modular design
- With valve controlled pump elements
- can be supplied with 3, 5, 7 or 9 pistons per section (depending on size)
- Design as multiple circuit pump on request
- Low-friction pumping elements with low sliding speed
- Ambient temperature up to -40 °C



Technical data

Hydraulic fluid	Mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	-20 to 80 °C
Ambient temperature range	-20 to 40 °C (-40 °C on request)
Viscosity range	5 to 220 mm ² /s
Max. operating pressure	700 bar
Operation pressure at suction port	-0,2 bar to 0,5 bar (relative)
Filtration (recommendation)	According to NAS 1638 class 6 resp. ISO/DIN 4406 17/15/12
Weight	See standard design
Axial force onto driving shaft	Not allowed
Radial force onto driving shaft	On request
Max. speed range	1800 rev
Direction of rotation	Any
Suction height	Max. 500 mm
Material	Pressure flange: steel forged Driving shaft: steel Cover: aluminium

Typeplate



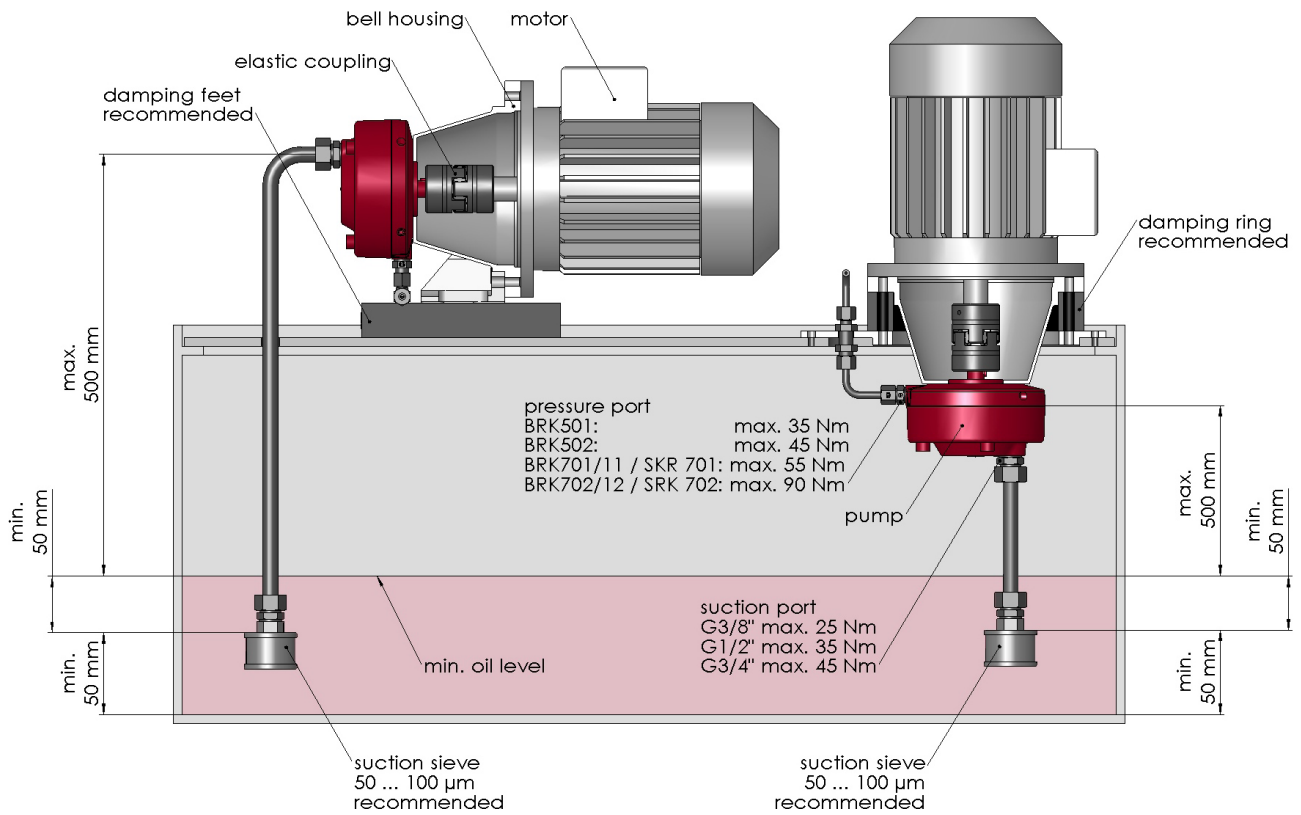
CE-marking	
EX-marking	
Device group II	Industrial environment
Equipment category	High degree of safety
Type of explosive atmosphere	Gas
Constructive safety	
EX-marking	
Type of protection h	Constructive safety
Gas group IIC	Suitable for gases and vapours with very low ignition energy
Temperature class	Max. surface temperature : 135 °C
Device protection level (EPL)	
Manufacturer	

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Mounting



Standard design

Size	Displacement [cm ³ /rev]	max. Operating pressure [bar]	Number of pumping elements	Weight ca. [kg]	max. Torque [Nm]	max. Power [kW]	Part No.
701	0,47	700	3	6,1	6,89	1,08	3867847
701	0,68	700	3	6,2	9,92	1,56	3888833
701	0,79	700	5	6,5	11,16	1,75	3888834
701	1,10	700	7	6,8	15,47	2,43	3888865
701	1,21	700	3	6,2	17,64	2,77	3888867
701	1,53	700	3	6,2	22,33	3,51	3888868
701	2,01	700	5	6,5	28,56	4,49	3888758
701	2,81	700	7	6,8	39,59	6,22	3873960
701	3,14	700	5	6,5	44,63	7,01	3888485
701	3,56	650	7	6,8	46,53	7,31	3888486
701	4,40	500	7	6,8	44,19	6,94	3888869
701	6,33	350	7	6,8	44,54	7,00	3888871*
702	2,81	700	7	15,2	39,59	6,22	3888872
702	3,56	700	7	15,4	50,11	7,87	3888874
702	4,40	700	7	15,4	61,86	9,72	3888885
702	4,58	700	9	15,7	64,43	10,12	3888886
702	5,65	700	9	15,7	79,54	12,49	3888887
702	6,33	650	7	15,4	82,72	12,99	3888888*
702	8,14	500	9	15,7	81,81	12,85	3888889*

*Please contact us if a mineral oil with a viscosity less than 15 mm²/s is required!

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. 0,8

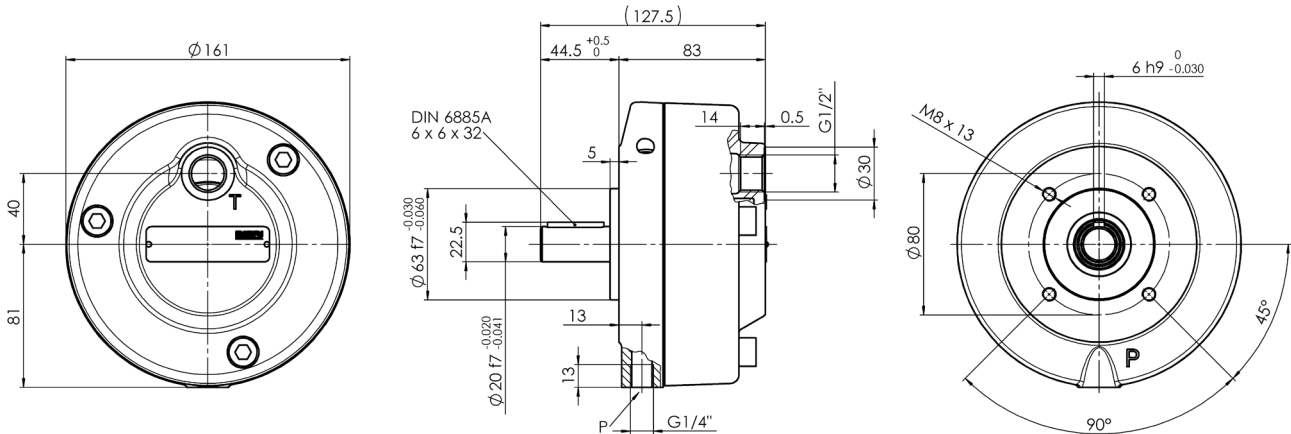
k = Pulsation factor
 - with 3 pumping elements: k approx. 1,05
 - with 5 pumping elements: k approx. 1,02
 - with 7 pumping elements: k approx. 1,01
 - with 9 pumping elements: k approx. 1,00

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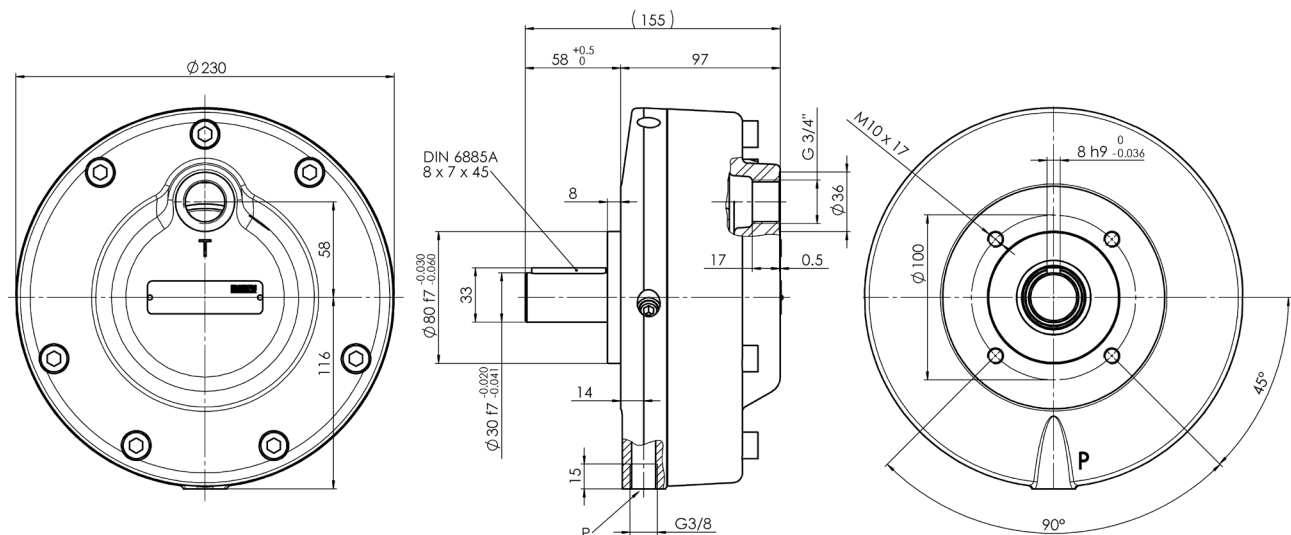
700 bar
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Dimensional drawings

Size SRK701-ATEX



Size SRK702-ATEX



Spare parts

Item description	Part No.
1 x Sealkit for SRK701	4006555
1 x Sealkit for SRK702	4006559

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The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.