

## Further development IPVS High-pressure internal gear pump



### Description

Voith Turbo internal gear pumps – this means sophisticated technology, robust construction and economical operation. By developing the proven IPV pump series further into the IPVS series, we are offering you these characteristics for even higher pressures – of course with all the advantages and features of IPV pumps.

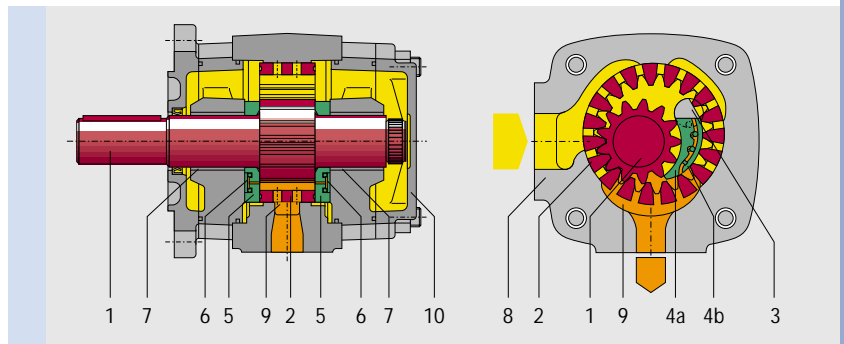
### Application

- Systems installations that require maximum continuous and peak pressures
- Units with fast-acting valves
- Systems with high pressure increase gradients and peak pressure levels

### Features and benefits

- Continuous pressures up to 345 bar
- Peak pressures up to 420 bar
- 6000 psi pressure connection
- High efficiencies
- Very low flow and pressure pulsation
- Low noise level
- Compact design
- Multiple pumps and pump combinations possible (also with pumps from other manufacturers)
- Suitable for variable-speed drives (variable volume flow)

Voith Turbo GmbH & Co. KG  
 Hydrostatics  
 Alexanderstr. 2  
 89522 Heidenheim, Germany  
 Tel. +49 7321 37-4573  
 Fax +49 7321 37-7809  
 hydrostatik@voith.com  
 www.voithturbo.com/hydrostatics.htm



Type, size- delivery	Displace- ment per revolution [cm <sup>3</sup> ]	Speed		Delivery at 1500 min <sup>-1</sup> [l/min]	Pressures		
		min. [min <sup>-1</sup> ]	max. [min <sup>-1</sup> ]		Continuous [bar]	Peak at 1500 min <sup>-1</sup> [bar]	Peak at $n_{max}$ [bar]
IPVS 3-3.5	3.6	400	3600	5.4	345	420	345
IPVS 3-5	5.2	400	3600	7.8	345	420	345
IPVS 3-6.3	6.4	400	3600	9.6	345	420	345
IPVS 3-8	8.2	400	3600	12.3	345	420	345
IPVS 3-10	10.2	400	3600	15.3	345	420	345
IPVS 4-13	13.3	400	3600	19.9	345	420	345
IPVS 4-16	16.3	400	3400	24.4	345	420	345
IPVS 4-20	20.7	400	3200	31.0	345	420	345
IPVS 4-25	25.4	400	3000	38.1	315	380	330
IPVS 4-32	32.6	400	2800	48.9	280	330	280
IPVS 5-32	33.1	400	3000	49.6	345	420	315
IPVS 5-40	41.0	400	2800	61.5	330	380	315
IPVS 5-50	50.3	400	2500	75.4	300	345	280
IPVS 5-64	64.9	400	2200	97.3	265	300	250

*Sectional view*

- 1 Pinon shaft
- 2 Internal gear
- 3 Filler pin
- 4a Filler segment carrier
- 4b Filler sealing segment
- 5 Axial disc
- 6 Axial pressure area
- 7 Plain bearings
- 8 Housing
- 9 Hydrostatic bearing
- 10 End cover with bleeder scrw

- Suction chamber
- Pressure chamber

The values shown apply to:

- Pumping of mineral oils with a viscosity of 20...40 mm<sup>2</sup>s<sup>-1</sup>
- Input pressures of 0.8...3.0 bar absolute

Please note:

- Peak pressures apply to 15% of operating time with a maximum cycle 1 minute.
- Peak pressures at non-standard speeds upon request.
- Due to production tolerances, the pump volume may be reduced by up to 1.5%.

Voith Turbo, the specialist for hydrodynamic drive, coupling and braking systems as well as hydrostatic pump systems, is a Group Division of Voith.

Voith is setting standards worldwide for papermaking technology, power transmission, energy technology, and industrial services. Voith was founded on January 1st, 1867. With annual sales of approximately Euro 3.1 billion, 24,000 employees and 180 locations worldwide, Voith is one of the largest family-owned companies in Europe.

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*Engineered reliability.*