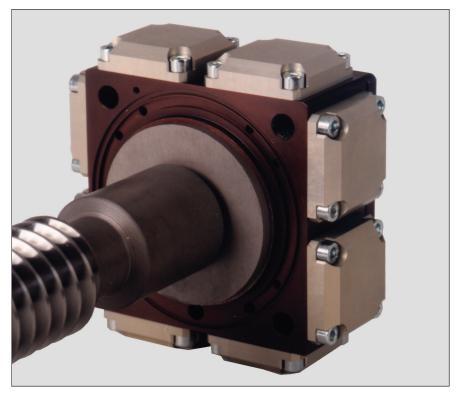
Rev. 12-1101 Page 1 of 1 Uncontrolled Document





Sizes of Hydrostatic Universal Bearings†

Size	50	63	80	100	125	160
Maximum axial force at 100 bar with 50% reserve	22 kN	34 kN	51 kN	77 kN	120 kN	200 kN
Minimum axial stiffness at 100 bar	2.5 kN/µm	3.7 kN/µm	5.5 kN/µm	8.5 kN/µm	12.5 N/µm	20 kN/μm
n max. with VG68/100 bar	750 rpm					
n max. with VG68/100 bar	2000 rpm					
	3200 rpm					

Technical Features of Size 50[‡]

		max. axial force with 50% reserve	miminal axial stiffness	oil demand with VG32
Data for maximum axial force and axial stiffness for size 50	25 bar	5500 N	800 N/µm	0.9 l/min
	32 bar	7000 N	1000 N/μm	1.0 l/min
	40 bar	8800 N	1250 N/um	1.3 l/min
axial force with 50% reserve	50 bar	11000 N	1600 N/µm	1.6 l/min
at pump pressure	63 bar	13800 N	2000 N/µm	1.9 I/min
	80 bar	17600 N	2500 N/µm	2.4 I/min
	100 bar	22000 N	3000 N/μm	3 l/min

Advantages of Hydrostatic Over Rolling Bearings

- · Frictionless even at minute revolutions
- Transmits minute rotating motion
- · No backlash when reversing direction
- · Slip-stick effect is eliminated
- Wear is eliminated because there is no metalto-metal contact during operation
- No loss of accuracy even after years of operation under full load
- No vibration as possible with bearings when ball direction is reversed
- · Insensitive to dirt and contamination

Unique Technical Features

- · Handles axial, radial and torque forces
- · Ideal for one-sided guidance of the leadscrew
- Highly precise bearing system for the leadscrew
- · Integral volume regulation
- · Only one hydraulic connection needed
- Input and drain lines are on the flange
- · Optional seal on one side, or labyrinth air purge
- · Adaptable to a machine's parameters:
 - Axial, radial, and torque loads
 - Maximum RPM
 - · Required stiffness
 - · Viscosity and temperature of hydraulic oil





^{†‡}All features can be changed, and can be adapted to a specific application.