KOLBEN PSM HYDRAULICS

403 series

Variable displacement axial piston bent-axis hydraulic motors

Purpose:
Hydraulic motors convert the working fluid energy into the shaft rotation mechanical energy. Hydraulic motors are intended for operation in stationary and mobile installations.

Working displacement: 55, 107, 160 ccm/rev

Technical characteristics:

Size		55	107	160
Working displacement - max $V_{g\ max}$ - min $V_{g\ min}$	ccm	55 0	107 0	160 0
Max rotation speed n_{max} at: - $V_{g\ max}$ - $V_{g\ min}$	rpm	4450 7000	3550 5600	3100 4900
Consumed flow rate (at n_{max}), Q_{max}	l/min	275	428	522
Power, N at $V_{g\ max}$ and Δp=450 bar at $V_{g\ max}$ and Δp=400 bar at $V_{g\ max}$ and Δp=350 bar at $V_{g\ max}$ and Δp=250 bar	kW	 184 164 143 102	 286 255 223 159	
Torque, T at $V_{g\ max}$ and Δp=450 bar at $V_{g\ max}$ and Δp=400 bar at $V_{g\ max}$ and Δp=350 bar at $V_{g\ max}$ and Δp=250 bar	Nm	 351 312 273 195	 684 608 532 380	
Weight, m	kg	24	40	

Special features:
- variable displacement axial pistoon bent-axis hydraulic motors
- reinforced bearing unit
- bimetal steel cylinder block
- increased lifetime at high pressure operation conditions

Types of regulators:
- proportional
- constant pressure regulator
- pressure regulator on hyperbole
- functioning only from outer force

Types of control:
- hydraulic direct
- hydraulic proportional
- mechanical
- electrical discrete
- electrical proportional

Analogues:
A6V, A6VM, A6VE (Bosch Rexroth)
51D (Sauer Danfoss)
V14 (Parker Hannifin)
H2V (Sam Hydraulics)