

POWERTECH

TORQUE  
MOTORS

SY  
SERIES

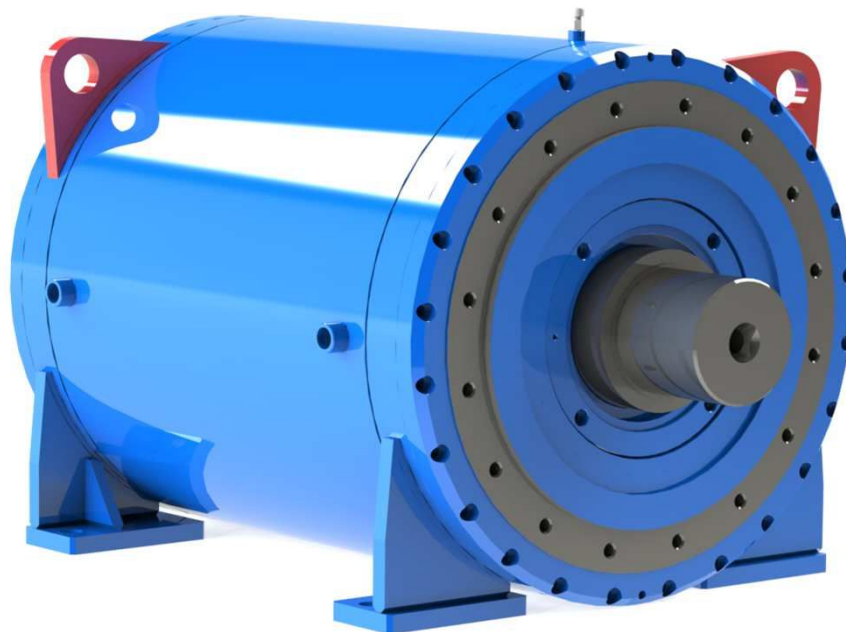
SYNCHRONOUS PERMANENT MAGNETS TORQUE MOTORS

RELIABILITY  
HIGH TORQUE  
EXCELLENT TORQUE/WEIGHT RATIO  
HIGH EFFICIENCY  
HIGH POLARITY (up to 88 poles) FOR EASY  
CONTROL AT LOW SPEED  
SUITABLE FOR VECTOR DRIVES  
IGBT COMPLIANT  
WIDE RANGE OF CUSTOMIZATION AND  
OPTIONS

TYPICAL APPLICATIONS

PRESSES  
ENERGY RECOVERY SYSTEMS  
FOOD BOXES EXTRUDERS  
PAPER AND CARDBOARD PRODUCTION  
MACHINERY  
PROCESSING AND CUTTING METAL PLATES  
METAL WIRE PROCESSING MACHINERY  
PLASTIC AND RUBBER EXTRUDERS  
LIFTING AND HANDLING SYSTEMS  
PACKAGING MACHINERY  
PRINTING MACHINERY  
TRACTION CONTROL  
MACHINE TOOLS  
COMPRESSORS

IP PROTECTION **IP54 or IP55**  
COOLING METHOD **LIQUID**



## TECHNICAL SPECIFICATIONS

IP PROTECTION	IP54 (IP55 on request)
THERMAL PROTECTION	PT100 (and other on request)
SHAFT EXTENSION	FITTED KEY (PLAIN SHAFT or HOLLOW SHAFT on request)
BALANCING	FULL KEY (HALF KEY on request)
VIBRATION GRADE	A (B on request)
INSULATION CLASS	F
COOLING METHOD	Liquid 20°C (68°F) + GLYCOL 20% Flow rate by size
AMBIENT CONDITIONS	0 ÷ 40°C (32 ÷ 104°F) 1000m ASL
TRANSDUCER	ENCODER OR RESOLVER (on request)
MOUNTING FORM	B3, B5, B35, active parts only, on request
PAINTING	NITRO, POLYURETHANIC, on request

## STANDARD WINDINGS DATA

TYPE	Poles	MOTOR SIZE	RATED TORQUE RANGE	RATED POWER RANGE	RATED SPEED RANGE	EFFICIENCY
	2p=					
SY16 FLUID 132	16	132	61 ÷ 565	0,7 ÷ 55	100 ÷ 1000	Up to 93%
SY24 FLUID 160	24	160	260 ÷ 1480	2,9 ÷ 111,4	100 ÷ 800	Up to 94%
SY32 FLUID 200	32	200	990 ÷ 2875	11,6 ÷ 187,6	100 ÷ 700	Up to 94%
SY40 FLUID 250	40	250	1690 ÷ 5740	19,6 ÷ 321	100 ÷ 600	Up to 95%
SY48 FLUID 315	48	315	4350 ÷ 11870	53 ÷ 518	100 ÷ 500	Up to 96%
SY54 FLUID 400	54	400	9400 ÷ 23300	60 ÷ 890	50 ÷ 450	Up to 97%
SY64 FLUID 500	64	500	14500 ÷ 39400	102 ÷ 1185	50 ÷ 400	Up to 97%
SY64 FLUID 600	64	600	22700 ÷ 55300	163 ÷ 1433	50 ÷ 350	Up to 97%
SY72 FLUID 700	72	700	31300 ÷ 80000	122 ÷ 1583	25 ÷ 300	Up to 97%
SY80 FLUID 800	80	800	38600 ÷ 104300	160 ÷ 1660	25 ÷ 250	Up to 97%
SY88 FLUID 900	88	900	60500 ÷ 140000	230 ÷ 2020	25 ÷ 200	Up to 97%

All data outputs are referred to power converter clocking frequency (PWM) >4kHz