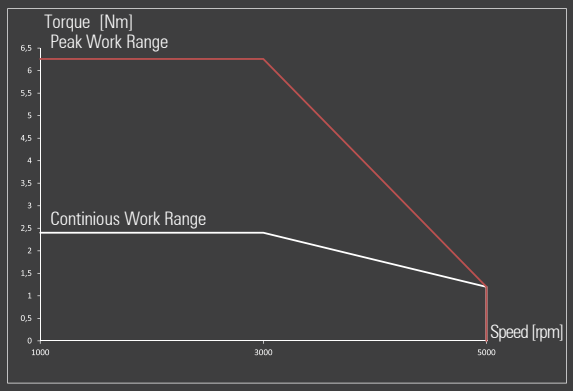
SM SERIES
SERVO MOTOR
SM08-DX-075BX

SM series industrial servo motors are used in many different applications such as factory automation, special machine production, machine tools and robotic. It provides high accuracy in applications which require precise positioning by means of its low cogging torque and torque ripple. There are 12 different power level motor options from 60 mm frame size 200W to 130 mm frame size 2kW. Braked option can be provided when needed in such applications. BiSS / SSI (absolute) and incremental encoder alternatives are offered for required applications. Through its compact construction, it brings a flexible solution for large machines and for the machines with limited space.

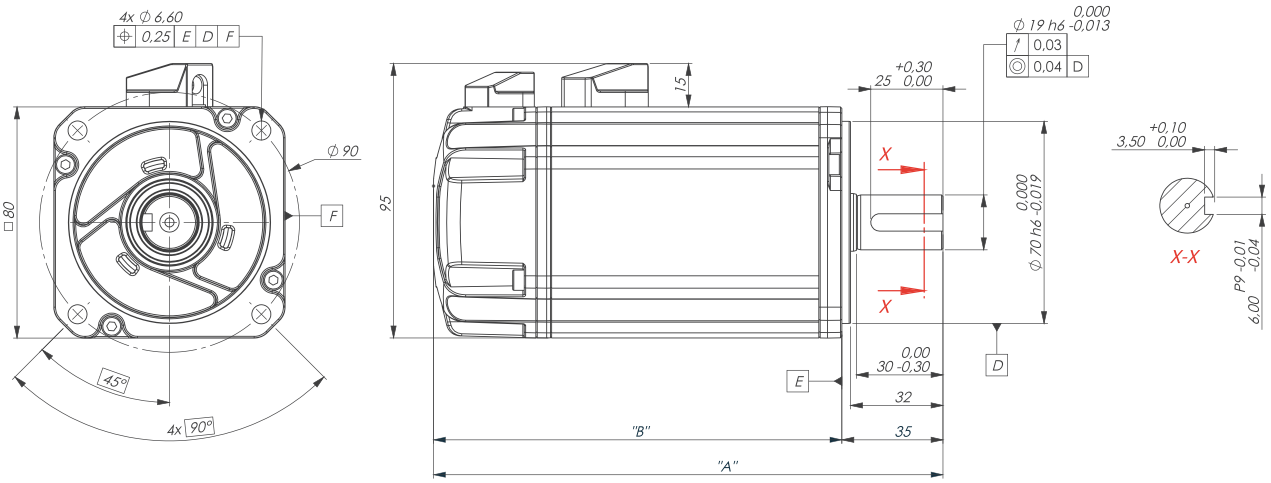
MOTOR PROPERTIES			
	PARAMETERS	UNIT	SM08-DX-075BX
GENERAL	DC Bus Voltage	V	310
	Rated Power	W	750
	Rated Torque	Nm	2,39
	Rated Current	A	5
	Rated Speed	rpm	3000
	Max Torque	Nm	6,26
	Max Current	A	15
	Max Speed	rpm	5000
	Efficiency	%	92,5
	Mechanical Time Constant	ms	0,203
	Electrical Time Constant	ms	8,634
	IP Rating	-	IP65*
ELECTRICAL	Torque Constant	Nm/A	0,48
	Voltage Constant	V/krpm	42
	Resistance	ohm	0,71
	Inductance	mH	6,13
MECHANICAL	Rotor Moment of Inertia (Without Brake)	$kg.cm^2$	1,1
	Rotor Moment of Inertia (With Brake)	$kg.cm^2$	1,2
	Weight (Without Brake)	kg	2,95
	Weight (With Brake)	kg	3,6
BRAKE	Static Torque	Nm	9±%5
	Operating Voltage	V	24±%10
	Power Consumption (20 °C)	W	11,62±%7
	Electrical Insulation Rating	-	H

SM08-DX-075BX



It is recommended to be used with SMB SD-LP-07-X servo motor drive which has high precision control, automatic control adjustment function.

* Protection level is IP65 when suitable connectors and shaft seals are used.

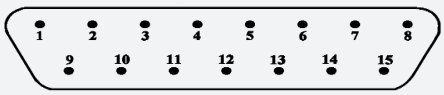


WITHOUT BRAKE		WITH BRAKE	
"A" (mm)	"B" (mm)	"A" (mm)	"B" (mm)
176,4	141,4	212,4	177,4

Dimensions are in mm.

CONNECTOR CONNECTION INFORMATION

Signal Connector (Male D-Sub 15Pin)		
Encoder	Colour Codes	Connector
+VDC	BROWN	1
GND	WHITE	2
A/ DATA+	GREEN	3
A-/ DATA-	GREEN / BLACK	4
B/ CLOCK+	YELLOW	5
B-/ CLOCK-	YELLOW / BLACK	6
Z	GREY	7
Z-	GREY/ BLACK	8
U	BLUE	9
U-	BLUE / BLACK	10
V	ORANGE	11
V-	ORANGE / BLACK	12
W	RED	13
W -	RED / BLACK	14
SHIELD	BLACK	15



Power Connector Without Brake		
(Binder RD24 99 4221 00 04)		
Motor	Colour Codes	Connector
U	BROWN (1)	1
V	GREY (2)	2
W	BLACK (3)	3
GROUND	GREEN	4/⏚

Power Connector With Brake		
(Binder RD24 99-4225-00-07)		
Motor	Colour Codes	Connector
U	BROWN (1)	1
V	GREY (2)	2
W	BLACK (3)	3
BRAKE +		4
BRAKE -		5
NC		6
GROUND	GREEN	⏚

ENCODER INFORMATION

Encoder Type	Supply Voltage (VDC)	Max Electrical Frequency (kHz)	Operating Temperature (°C)	Speed (rpm)	Encoder Resolution (bit)
1: Incremental	4,75 - 5	>200	-20 ...+85	≤10000	13
2: BISS / SSI	4,75 - 5	>200	-20 ...+85	≤10000	17 - 21