Minebea

PM Type Motors

■ Reference Characteristics

Motor Size	PM42L — 048	
Number of Steps per Rotation	48 (7.5° / Step)	
Drive Method	2 — 2 PHASE	
Drive Circuit	UNIPOLAR CONST. VOLT.	BIPOLAR CHOPPER
Drive Voltage	24 [V]	24 [V]
Current / Phase		600 [mA]
Coil Resistance / Phase	60 [Ω]	7 [Ω]
Drive IC	2SC3346	UDN2916B — V
Magnet Material	Ferrite plastic magnet (MSPL) Polar anisotropy ferrite sintered magnet (MS50)	
	Nd-Fe-B bonded magnet (MS70)	
Insulation Resistance	100M [Ω] MIN	
Dielectric Strength	AC 500 [V] 1 [min]	
Class of Insulation	CLASS E (リーexcept lead wire)	
Operating Temp.	- 10 [°C] ~ 50 [°C]	
Storage Temp.	- 30 [°C] ~ 80 [°C]	
Operating Hum.	20 [%] RH ~ 90 [%] RH	

Applications

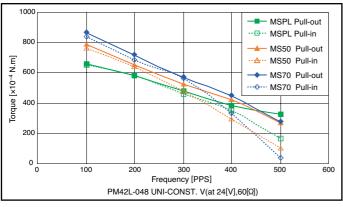
OA Equipment : Printers / Scanners

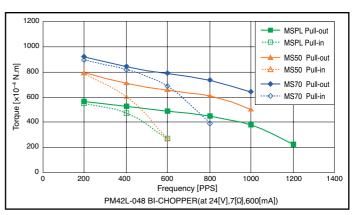
Industrial equipment: Flow control valves

Toys: Slot machines

Home automation appliances : Sewing machines

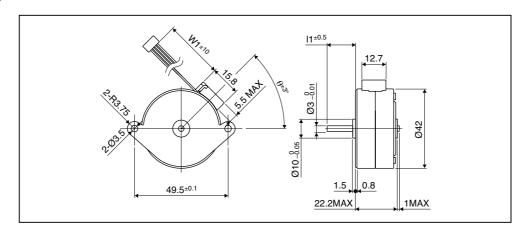
Torque Characteristics





These torque values are reference only. Heat radiation conditions and temperature rise effect by duty are different on each equipment, therefore please select motors after considering the actual equipment.

Dimensions





Minebea

PM42S-048 PM Type

■ Reference Characteristics

Motor Size	PM42S — 048		
Number of Steps per Rotation	48 (7.5° / Step)		
Drive Method	2 – 21	2 — 2 PHASE	
Drive Circuit	UNIPOLAR CONST. VOLT.	BIPOLAR CHOPPER	
Drive Voltage	24 [V]	24 [V]	
Current / Phase		500 [mA]	
Coil Resistance / Phase	45 [Ω]	11.3 [Ω]	
Drive IC	2SC3346	UDN2916B — V	
Magnet Material	Ferrite plastic magnet (MSPL) Polar anisotropy ferrite sintered magnet (MSS0)		
	Nd-Fe-B bonded r	nagnet (MS70)	
Insulation Resistance	100M [ú	100M [Ω] MIN	
Dielectric Strength	AC 500 [V	AC 500 [V] 1 [min]	
Class of Insulation	CLASS E (リー except lead wire)		
Operating Temp.	- 10 [℃]	- 10 [°C] ~ 50 [°C]	
Storage Temp.	- 30 [°C] ~ 80 [°C]		
Operating Hum.	20 [%] RH ~	20 [%] RH ~ 90 [%] RH	

Applications

OA Equipment : Printers / Scanners

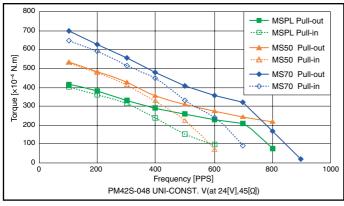
Industrial equipment: Flow control valves

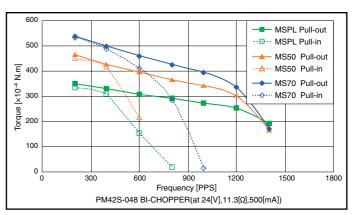
Toys: Slot machines

Home automation appliances : Sewing machines

Motors

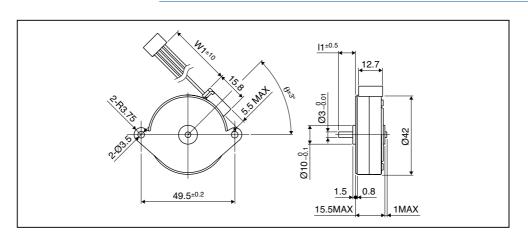
Torque Characteristics





These torque values are reference only. Heat radiation conditions and temperature rise effect by duty are different on each equipment, therefore please select motors after considering the actual equipment.

Dimensions







PM Type Motors

■ Reference Characteristics

Motor Size	PM42L — F48	
Number of Steps per Rotation	48 (7.5° / Step)	
Drive Method	2 — 2 PHASE	
Drive Circuit	BIPOLAR CHOPPER	
Drive Voltage	24 [V]	
Current / Phase	600 [mA]	
Coil Resistance / Phase	7 [Ω]	
Drive IC	LB1847	
Magnet Material	Polar anisotropy ferrite sintered magnet (MS50)	
Insulation Resistance	100M [Ω] MIN	
Dielectric Strength	AC 500 [V] 1 [min]	
Class of Insulation	CLASS E(リーexcept lead wire)	
Operating Temp.	- 10 [°C] ~ 50 [°C]	
Storage Temp.	- 30 [°C] ~ 80 [°C]	
Operating Hum.	20 [%] RH ~ 90 [%] RH	

Applications

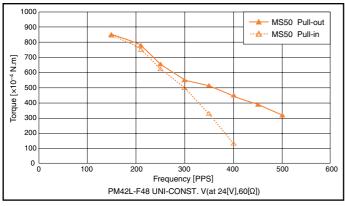
OA Equipment: Printers / Scanners

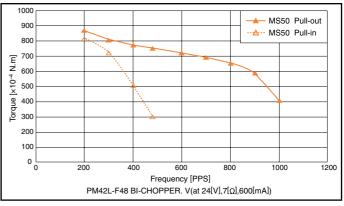
Industrial equipment: Flow control valves

Toys: Slot machines

Home automation appliances : Sewing machines

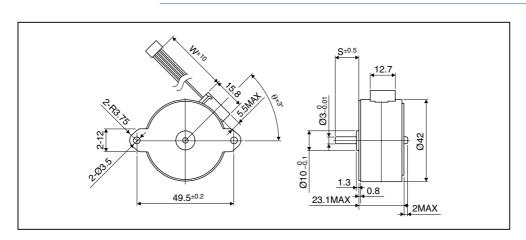
■ トルク特性 Torque Characteristics





These torque values are reference only. Heat radiation conditions and temperature rise effect by duty are different on each equipment, therefore please select motors after considering the actual equipment.

Dimensions







■ Reference Characteristics

Motor Size	PM42S — F48	
Number of Steps per Rotation	48 (7.5° / Step)	
Drive Method	2 — 2 PHASE	
Drive Circuit	BIPOLAR CHOPPER	
Drive Voltage	24 [V]	
Current / Phase	500 [mA]	
Coil Resistance / Phase	7.8 [Ω]	
Drive IC	LB1847	
Magnet Material	Polar anisotropy ferrite sintered magnet (MS50)	
Insulation Resistance	100M [Ω] MIN	
Dielectric Strength	AC 500 [V] 1 [min]	
Class of Insulation	CLASS E	
Operating Temp.	- 10 [°C] ~ 50 [°C]	
Storage Temp.	- 30 [°C] ~ 80 [°C]	
Operating Hum.	20 [%] RH ~ 90 [%] RH	

Applications

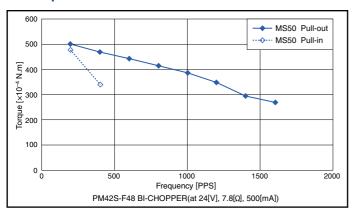
OA Equipment: Printers / Scanners

Industrial equipment : Flow control valves

Home automation appliances: Sewing machines

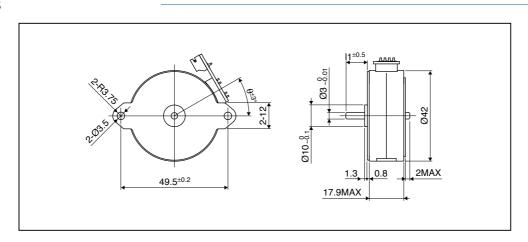
Motors

■ Torque Characteristics



These torque values are reference only. Heat radiation conditions and temperature rise effect by duty are different on each equipment, therefore please select motors after considering the actual equipment.

Dimensions





Minebea



■ Reference Characteristics

Motor Size	PM42S	PM42S — 096	
Number of Steps per Rotation	96 (3.75°	96 (3.75° / Step)	
Drive Method	2 — 2 PHASE		
Drive Circuit	UNIPOLAR CONST. VOLT.	BIPOLAR CHOPPER	
Drive Voltage	24 [V]	24 [V]	
Current / Phase		500 [mA]	
Coil Resistance / Phase	90 [Ω]	10 [Ω]	
Drive IC	2SC3346	UDN2916B — V	
Magnet Material	Nd-Fe-B bonded	Nd-Fe-B bonded magnet (MS70)	
Insulation Resistance	100M [100M [Ω] MIN	
絶縁耐圧 Dielectric Strength	AC 500 [V	AC 500 [V] 1 [min]	
絶縁種 Class of Insulation	CLASS E(リード線を	CLASS E(リード線を除く except lead wire)	
動作温度範囲 Operating Temp.	- 10 [℃]	- 10 [°C] ~ 50 [°C]	
保存温度範囲 Storage Temp.	- 30 [°C]	- 30 [°C] ~ 80 [°C]	
動作湿度範囲 Operating Hum.	20 [%] RH ~	20 [%] RH ~ 90 [%] RH	

■ 用途 Applications

OA 機器: プリンタ、スキャナ OA Equipment: Printers / Scanners

産業機器:流量制御バルブ

Industrial equipment: Flow control valves

玩具:スロットマシン Toys:Slot machines

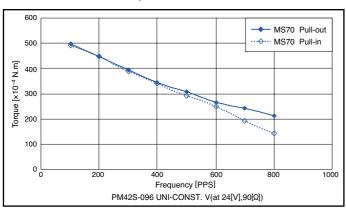
HA 機器:ミシン

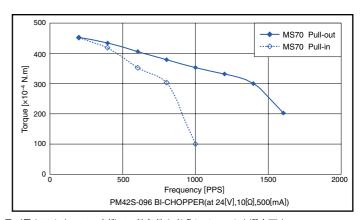
Home automation appliances : Sewing machines

PM Type

Motors

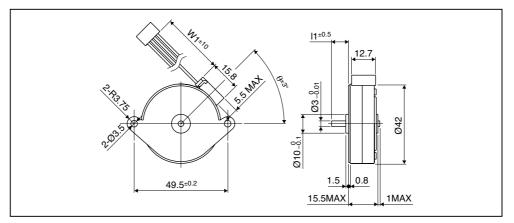
■ トルク特性 Torque Characteristics





このトルク値は一般参考値です。ご使用の際には放熱条件やデューティーにより温度上昇が異なりますので、実機での熱条件を考慮してモータを選定下さい。 These torque values are reference only. Heat radiation conditions and temperature rise effect by duty are different on each equipment, therefore please select motors after considering the actual equipment.

■ モータ外観寸法 Dimensions



在庫状況及び受注ロットについては、弊社営業にお問合せ下さい。 仕様については予告なく変更する場合がございます。 Please contact our sales for inventory and lot information. Specification may be changed without notice.





Reference Characteristics

Motor Size	PM42S — 0X1	
Number of Steps per Rotation	100 (3.6° / Step)	
Drive Method	2 — 2 PHASE	
Drive Circuit	UNIPOLAR CONST. VOLT.	BIPOLAR CHOPPER
Drive Voltage	24 [V]	24 [V]
Current / Phase		500 [mA]
Coil Resistance / Phase	90 [Ω]	5.8 [Ω]
Drive IC	2SC3346	UDN2916B — V
Magnet Material	Nd-Fe-B bonded magnet (MS70)	
Insulation Resistance	100M [Ω] MIN	
Dielectric Strength	AC 500 [V] 1 [min]	
Class of Insulation	CLASS E (U — except lead wire)	
Operating Temp.	- 10 [°C] ~ 50 [°C]	
Storage Temp.	- 30 [°C] ~ 80 [°C]	
Operating Hum.	20 [%] RH ~ 90 [%] RH	

Applications

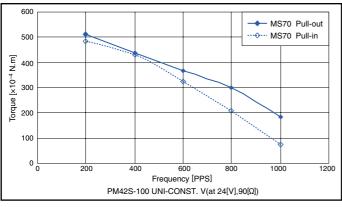
OA Equipment: Printers / Scanners

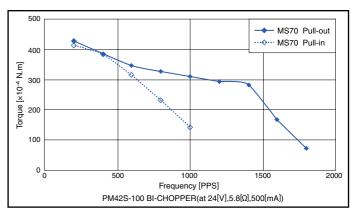
Industrial equipment: Flow control valves

Toys: Slot machines

Home automation appliances : Sewing machines

■ Torque Characteristics





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■ モータ外観寸法 Dimensions

