

Standard AC Motors

Accessories

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Accessories

Introduction

Induction Motors

Reversible Motors

Electromagnetic Brake Motors

V Series

Clutch & Brake Motors

Synchronous Motors

Low-Speed Synchronous Motors

Watertight Dust-Resistant Motors

Torque Motors

Right-Angle Gearheads

Linear Heads

Brake Pack

Accessories

Installation

Motor/Gearhead Mounting Brackets RoHS

This is an aluminum die cast mounting bracket for gearheads and geared motors. There are also high-strength models available for high-power motors and gearheads. Long, horizontal holes make it easy to make fine adjustments during installation.



Product Line

Material: Aluminum alloy Surface treatment: paint

Standard AC Motors

Select the pinion shaft type based on the gearhead to be attached.

Model	Applicable Product		
	Gearhead	Geared Motor Combination Type	Round Shaft Type
SOL0U04	0GN□KA	—	0IK 0RK
SOL2U08	2GN□SA	—	2IK 2RK 2TK
SOL2M4	2GN10XS (Decimal Gearhead)*	VHI2 VHR2	—
SOL3U10	3GN□SA	—	3IK 3RK 3TK
SOL3M5	3GN10XS (Decimal Gearhead)*	—	—
SOL3M6	—	VHI3 VHR3	—
SOL4U10	4GN□SA	—	4IK 4RK 4TK
SOL4M5	4GN10XS (Decimal Gearhead)*	—	—
SOL4AP	—	FPW4	—
SOL4M6	—	VHI4 VHR4	—
SOL5UA	5GN□SA 5GE□SA 5GU□SA	—	5IK 5RK 5TK
SOL5M6	5GN10XS (Decimal Gearhead)* 5GE10XS (Decimal Gearhead)* 5GU10XKB (Decimal Gearhead)*	—	—
SOL5M8	—	VHI5 VHR5	—
SOL5AP	—	FPW5	—
SOL6M8	—	BHI62-□	BHI62-A
SOL6AP	—	FPW6	—

* Use this mounting bracket when using a decimal gearhead with parallel shaft gearhead.

- Enter the gear ratio in the box (□) within the model name.
- Letters are provided in the applicable products table for identifying the series.

Notes

Not available for the following products.

- **GC, GCH** Pinion Gearheads
- Right-Angle Gearhead (**RH** Type, **RAA** Type)
- Right-Angle Shaft Type (**BH** Series)

● Brushless Motors and AC Speed Control Motors

● Select the pinion shaft type based on the gearhead to be attached.

Model	Applicable Product				
	Brushless Motors		AC Speed Control Motors		
	Combination Type	Round Shaft Type	Gearhead	Combination Type	Round Shaft Type
SOL0U04	–	BLH015-A	–	–	–
SOL0B	BLH015-□	–	–	–	–
SOL2U08	–	–	2GN□SA	–	2IK6RA 2RK6RA
SOL2M4	BX230-□S BLF230-□ BLE23□S BLU220-□ BLH230-□	BX230-A BLF230-A BLE23A BLU220-A BLH230-A	2GN10XS (Decimal Gearhead)*	VSI206 VSR206	–
SOL3U10	–	–	3GN□SA	–	3IK15RA 3RK15RA
SOL3M5	–	–	3GN10XS (Decimal Gearhead)*	–	–
SOL3M6	–	–	–	VSI315 VSR315	–
SOL4U10	–	–	4GN□SA	–	4IK25RA 4RK25RA
SOL4M5	–	–	4GN10XS (Decimal Gearhead)*	–	–
SOL4M6	BX460-□S BLF460-□ BLE46□S BLU440-□ BLH450-□	BX460-A BLF460-A BLE46A BLU440-A BLH450-A	–	VSI425 VSR425	–
SOL5UA	–	–	5GN□SA 5GE□SA 5GU□SA	–	5IK40RA 5RK40RA 5IK60RA 5RK60RA
SOL5M6	–	–	5GN10XS (Decimal Gearhead)* 5GE10XS (Decimal Gearhead)* 5GU10XKB (Decimal Gearhead)*	–	–
SOL5M8	BX5120-□S BLF5120-□ BLE512□S BLU590-□ BLH5100-□	BX5120-A BLF5120-A BLE512A BLU590-A BLH5100-A	–	VSI540 VSI560 VSR540 VSR560	–
SOL6M8	BX6200-□S BX6400-□S BLF620-□S BLF640-□S	BX6200-A BX6400-A BLF620-A BLF640-A	–	BHF62-□	BHF62-A

* Use this mounting bracket when using a decimal gearhead with parallel shaft gearhead.

● Enter the gear ratio in the box (□) within the model name.

● Letters are provided in the applicable products table for identifying the series.

Notes

Not available for the following products.

● Right-Angle Gearhead (**RH** Type, **RAA** Type)

● Right-Angle Shaft Type (**BHF** Series)

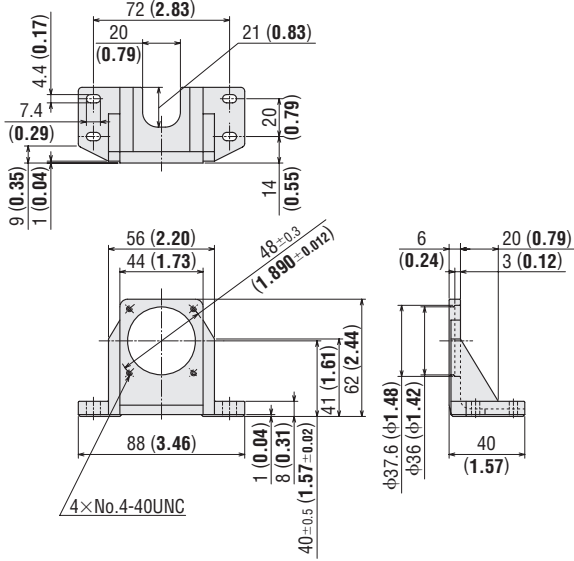
● Hollow Shaft Flat Gearhead (**GFS2G□FR**, **GFS4G□FR**, **GFS5G□FR**)

Dimensions Unit = mm (in.)

SOL0U04

Mass: 85 g (3.0 oz.)

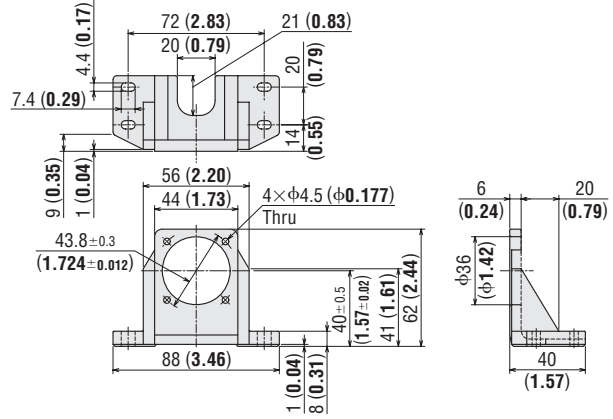
DXF A320U



SOLOB

Mass: 85 g (3.0 oz.)

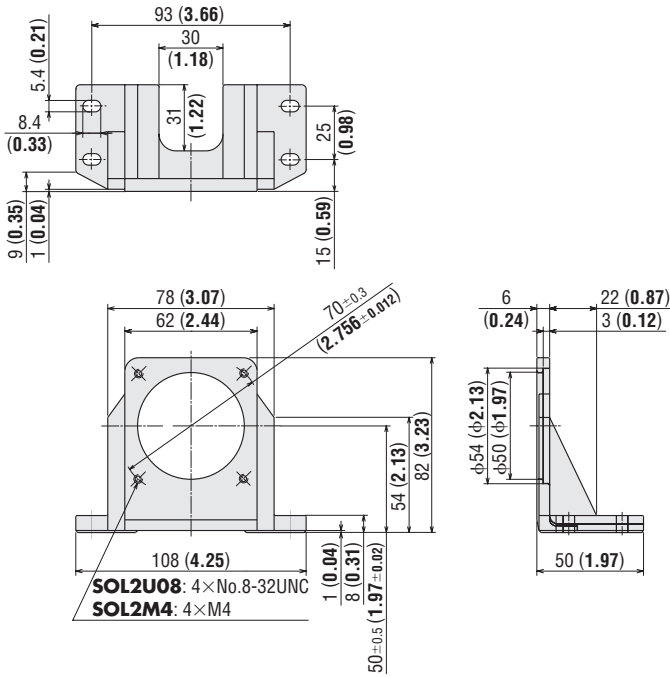
DXF B267



SOL2U08, SOL2M4

Mass: 135 g (4.8 oz.)

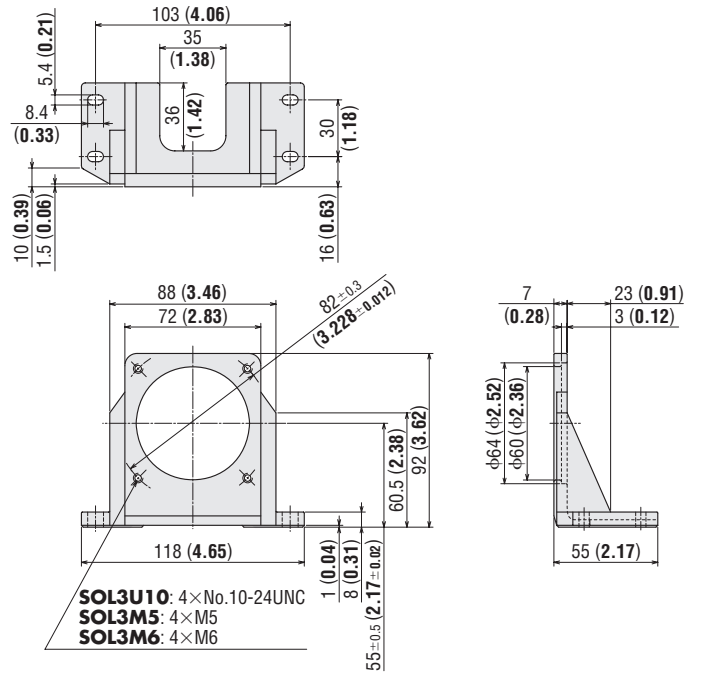
DXF A321U (**SOL2U08**)
A321 (**SOL2M4**)



SOL3U10, SOL3M5, SOL3M6

Mass: 175 g (6.2 oz.)

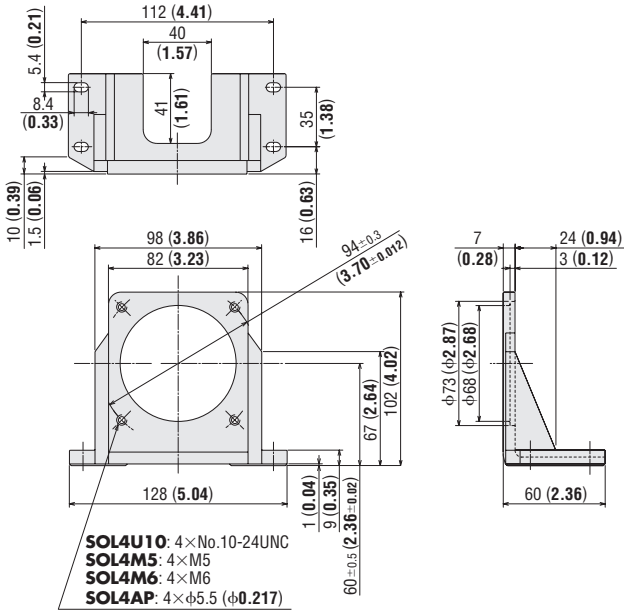
DXF A322U (**SOL3U10**)
A322 (**SOL3M5**)
A323 (**SOL3M6**)



SOL4U10, SOL4M5, SOL4M6, SOL4AP

Mass: 210 g (7.4 oz.)

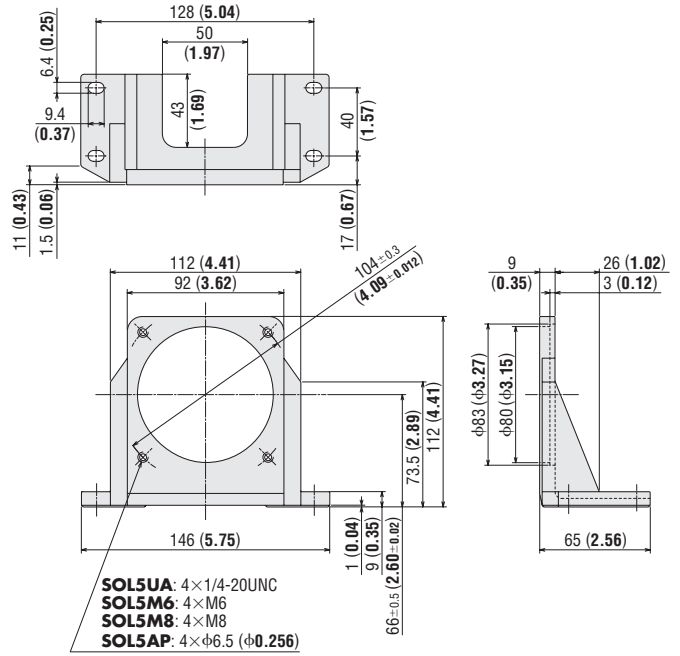
- DXF** A236U (**SOL4U10**)
 A236 (**SOL4M5**)
 A237 (**SOL4M6**)
 A1075 (**SOL4AP**)



SOL5UA, SOL5M6, SOL5M8, SOL5AP

Mass: 270 g (9.5 oz.)

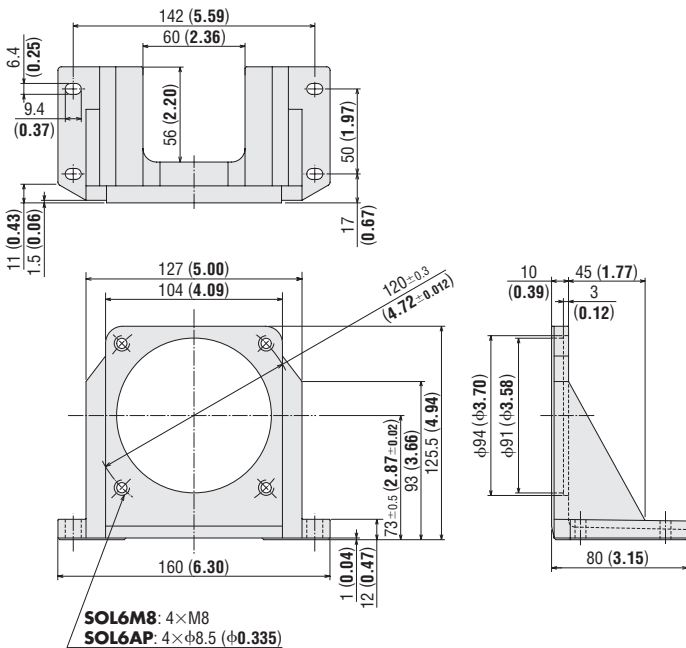
- DXF** A238U (**SOL5UA**)
 A238 (**SOL5M6**)
 A239 (**SOL5M8**)
 B270 (**SOL5AP**)



SOL6M8, SOL6AP

Mass: 430 g (15.2 oz.)

- DXF** A240 (**SOL6M8**)
 A1076 (**SOL6AP**)



Introduction

Induction Motors

Reversible Motors

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V Series

Clutch & Brake Motors

Synchronous Motors

Low-Speed Synchronous Motors

Waterright Dust-Resistant Motors

Torque Motors

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Installation

Torque Arm RoHS

In order to prevent gearheads from rotating due to the reactive force of the shaft being driven, the torque arm acts as an anti-spin mechanism when a right-angle, hollow shaft type gearhead is installed.



Product Line

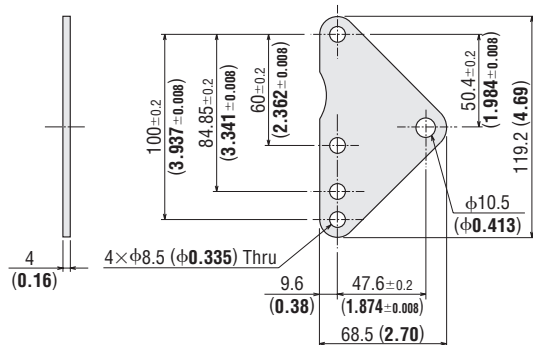
Material: SPCC Surface treatment: paint

Model	Applicable Product			
	Standard AC Motors		Speed Control Motors	
	Gearhead	BH Series	Gearhead	BHF Series
SOT6	5GE□RH 5GU□RH	BH162□□RH BH162□T□RH BH162□T2□RH BH162□MT□RH	5GE□RH 5GU□RH	BHF62□T□RH BHF62□MT□RH

- Enter the power supply voltage (**A, C, S, F** or **E**) in the box (□) within the model name.
- Enter the gear ratio in the box (□) within the model name.

Dimensions Unit = mm (in.)

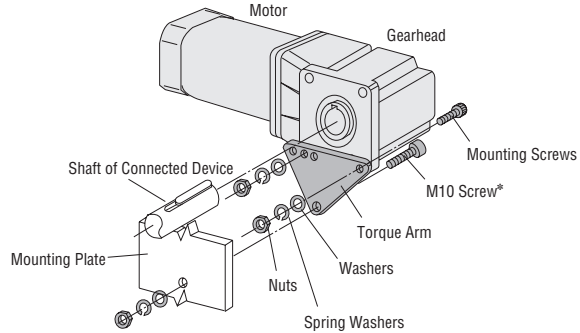
Mass: 145 g (5.1 oz.)



Mounting Method

When mounting on a device, secure the torque arm firmly using an M10 screw.

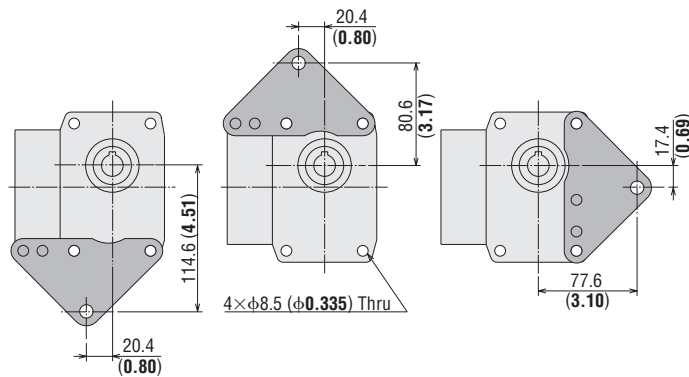
*M10 screws must be purchased separately.



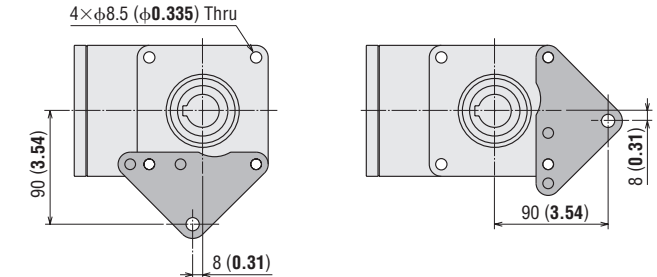
Mounting Hole Dimensions Unit = mm (in.)

Torque arm mounting holes are processed with the dimensions shown in the figure below.

● 5GE□RH, 5GU□RH



● BH Series, BHF Series Right-Angle Shaft, Hollow Shaft Type



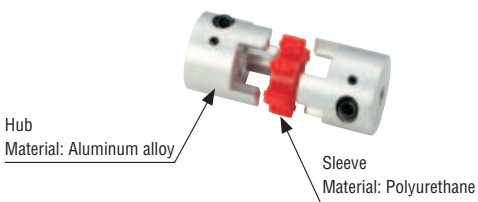
Flexible Couplings RoHS

These products are clamp type couplings used to connect a motor or gearhead shaft to the shaft of the equipment.

Once the motor or gearhead is determined, the proper coupling can be selected.

Features

- Good for high torque applications
- Excellent for preventing eccentricity
- The structure features a separated hub and sleeve, so workability during installation is improved.



Selecting a Flexible Coupling

Once you decide on a motor or gearhead and the shaft diameter of the equipment to be connected, you can select the proper flexible coupling to use. **MCL** couplings are available in several external diameters that provide the strength required for the torque of the motor or gearhead.

Example **MCL 30 F06 F06**

Inner Diameter d1 Inner Diameter d2

- For uniform load, when the gearhead is **4GN□SA** (shaft outer diameter of $\phi 3/8$ in.) and the shaft diameter of the equipment to be connected is $\phi 3/8$ in., use **MCL30F06F06**.
- For impact-applied use, when the gearhead is **4GN□SA** (shaft outer diameter of $\phi 3/8$ in.) and the shaft diameter of the equipment to be connected is $\phi 3/8$ in., use **MCL40F06F06**.

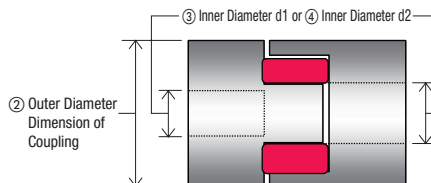


Product Number Code

MCL 40 F08 F10

① ② ③ ④

①	Flexible Coupling	
②	Outer Diameter of Coupling	20: $\phi 20$ mm ($\phi 0.79$ in.)~ 65: $\phi 65$ mm ($\phi 2.56$ in.)
③	Inner Diameter d1 (Small Inner Diameter)	06: $\phi 6$ mm ($\phi 0.2362$ in.)~ 25: $\phi 25$ mm ($\phi 0.9843$ in.) F03: 4.762 mm (3/16 in.)~ F12: 19.05 mm (3/4 in.)
④	Inner Diameter d2 (Large Inner Diameter)	06: $\phi 6$ mm ($\phi 0.2362$ in.)~ 25: $\phi 25$ mm ($\phi 0.9843$ in.) F03: 4.762 mm (3/16 in.)~ F12: 19.05 mm (3/4 in.)



Applicable Products

- Couplings are also available for round shaft motors, if a shaft diameter matches.
- For the round shaft type and the geared motor of the low-speed synchronous motor **SMK** Series, refer to the **MCS** coupling.
- For the **BX** Series round shaft type, refer to the **MCS** coupling.

Gearhead Model		Coupling Type	Shaft Diameter		Connected Device Shaft Diameter									
					F03	F04	F05	F06	F08	F10	F12	20	22	25
Uniform Load	Shock Load		mm	in.	4.762	6.350	7.937	9.525	12.7	15.875	19.05	20	22	25
					mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
					3/16	1/4	5/16	3/8	1/2	5/8	3/4	0.7874	0.8661	0.9843
					in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
0GN□SA	0GN□SA	MCL20	F03	4.762	3/16	○	○	○						
BLH015	BLH015		O6	6	0.2362	○	○	○						
—	—		F04	6.350	1/4	○	○	○						
2GN□SA	—		F05	7.937	5/16	○	○	○						
—	—		O8	8	0.3150	○	○	○						
—	2GN□SA	MCL30	F04	6.350	1/4		○							
—	—		F05	7.937	5/16		○	○	○					
—	—		O8	8	0.3150		○	○	○					
3GN□SA, 4GN□SA, 4GN□RAA, 5GN□RAA	3GN□SA		F06	9.525	3/8			○	○	○				
VH206, VHR206, BX230, BLF230, BLE23, BLU220, BLH230, VSI206, VSR206	—		10	10	0.3937			○	○	○				
VHI315, VHR315, VSI315, VSR315	—	MCL40	12	12	0.4724			○	○	○				
5GN□SA	—		F08	12.7	1/2			○	○	○				
—	4GN□SA, 4GN□RAA, 5GN□RAA		F05	7.937	5/16			○	○	○				
—	—		F06	9.525	3/8			○	○	○				
—	VHI315, VHR315, VSI315, VSR315		10	10	0.3937			○	○	○				
—	5GN□SA, 5GC□KA	MCL55	F08	12.7	1/2			○	○	○				
—	—		14	14	0.5512			○	○	○				
VHI425, VHR425, BX460, BLF460, BLE46, BLU440, BLH450, VSI425, VSR425	—		15	15	0.5906			○	○	○				
5GE□SA, 5GU□SA, 5GE□RAA, 5GU□RAA	—	MCL65	F10	15.875	5/8				○	○				
—	VHI425, VHR425, BX460, BLF460, BLE46, BLU440, BLH450, VSI425, VSR425		18	18	0.7087				○	○				
VHI540, VHR540, VHI560, VHR560, VHI590, VHR590, BX5120, BLF5120, BLE512, BLU590, BLH5100, VSI540, VSR540, VSI560, VSR560, VSI590, VSR590	—		F12	19.05	3/4					○				
BHI62-□, BHF62-□	—	MCL65	18	18	0.7087				○	○				
—	BHI62-□, BHF62-□		22	22	0.8661						○	○	○	
BHI62-□RA, BHF62-□RA, BX6200, BX6400, BLF6200, BLF6400	—													

- Enter the gear ratio in the box (□) within the model name.
- Letters are provided in the applicable products table for identifying the series.

Specifications

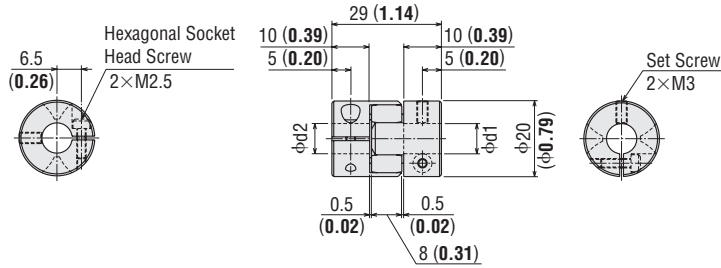
Coupling Type	Model	Dimensions				Nominal Torque	Mass	Moment of Inertia: J	Permissible Eccentricity	Permissible Declination	Permissible End Play	
		Outer Diameter mm (in.)	Length mm (in.)	Shaft Hole Diameter mm (in.)	Shaft Hole Diameter mm (in.)							
MCL20	MCL20F03F03	φ20 (φ0.79)	29 (1.14)	4.762 (0.1875)	4.762 (0.1875)	5 (44)	19 (0.67)	0.01 (0.055)	0.15 (5.9×10 ⁻³)		+0.8 0 (+0.031 0)	
	MCL20F03F04				6.35 (0.2500)							
	MCL20F03F05				7.937 (0.3125)							
	MCL2006F03			6 (0.2362)	4.762 (0.1875)							
	MCL2006F04				6.35 (0.2500)							
	MCL2006F05				7.937 (0.3125)							
	MCL20F04F04			6.35 (0.2500)	6.35 (0.2500)							6.35 (0.2500)
	MCL20F04F05											7.937 (0.3125)
	MCL20F05F05											7.937 (0.3125)
	MCL2008F04			8 (0.3150)	6.35 (0.2500)							6.35 (0.2500)
MCL2008F05	7.937 (0.3125)											
MCL30	MCL30F04F05	φ30 (φ1.18)	43.5 (1.71)	6.35 (0.2500)	6.35 (0.2500)	12.5 (110)	66 (2.3)	0.083 (0.45)			+1.0 0 (+0.039 0)	
	MCL30F05F05				7.937 (0.3125)							
	MCL30F05F06			9.525 (0.3750)								
	MCL3008F04			8 (0.3150)	6.35 (0.2500)							
	MCL3008F05				7.937 (0.3125)							
	MCL3008F06				9.525 (0.3750)							
	MCL30F06F06			9.525 (0.3750)	9.525 (0.3750)							9.525 (0.3750)
	MCL30F06F08											12.7 (0.5000)
	MCL3010F05											7.937 (0.3125)
	MCL3010F06			10 (0.3937)	9.525 (0.3750)							9.525 (0.3750)
	MCL3010F08											12.7 (0.5000)
	MCL3012F05			12 (0.4724)	7.937 (0.3125)							7.937 (0.3125)
	MCL3012F06											9.525 (0.3750)
	MCL3012F08											12.7 (0.5000)
	MCL30F08F08			12.7 (0.5000)	12.7 (0.5000)							12.7 (0.5000)
MCL40	MCL40F05F06	φ40 (φ1.57)	64 (2.52)	7.937 (0.3125)	7.937 (0.3125)	25.0 (220)	150 (5.3)	0.36 (1.97)	0.2 (7.9×10 ⁻³)	1.0	+1.2 0 (+0.047 0)	
	MCL40F06F06				9.525 (0.3750)							
	MCL40F06F08			12.7 (0.5000)								
	MCL4010F05			10 (0.3937)	7.937 (0.3125)							
	MCL4010F06				9.525 (0.3750)							
	MCL4010F08				12.7 (0.5000)							
	MCL4012F06			12 (0.4724)	9.525 (0.3750)							9.525 (0.3750)
	MCL4012F08											12.7 (0.5000)
	MCL4012F10											15.875 (0.6250)
	MCL40F08F08			12.7 (0.5000)	12.7 (0.5000)							12.7 (0.5000)
	MCL40F08F10											15.875 (0.6250)
	MCL4014F06			14 (0.5512)	9.525 (0.3750)							9.525 (0.3750)
	MCL4014F08											12.7 (0.5000)
	MCL4014F10											15.875 (0.6250)
	MCL4015F06			15 (0.5906)	9.525 (0.3750)							9.525 (0.3750)
	MCL4015F08											12.7 (0.5000)
	MCL4015F10											15.875 (0.6250)
	MCL40F10F10			15.875 (0.6250)	15.875 (0.6250)							15.875 (0.6250)
MCL55	MCL5515F08	φ55 (φ2.17)	76 (2.99)	15 (0.5906)	12.7 (0.5000)	60.0 (530)	350 (12.4)	1.6 (8.8)			+1.4 0 (+0.055 0)	
	MCL5515F10				15.875 (0.6250)							
	MCL5515F12				19.05 (0.7500)							
	MCL55F10F10			15.875 (0.6250)	15.875 (0.6250)							
	MCL55F10F12				19.05 (0.7500)							
	MCL5518F10				15.875 (0.6250)							
MCL5518F12	18 (0.7087)	19.05 (0.7500)										
MCL65	MCL6518F10	φ65 (φ2.56)	87.5 (3.44)	18 (0.7087)	15.875 (0.6250)	160 (1410)	570 (20)	3.7 (20)			+1.5 0 (+0.059 0)	
	MCL6518F12				19.05 (0.7500)							
	MCL652022			20 (0.7874)	22 (0.8661)							
	MCL652222			22 (0.8661)	22 (0.8661)							
	MCL652225			22 (0.8661)	25 (0.9843)							

● The specifications above are the values when combined with Oriental Motor's motor and gearhead.

Dimensions Unit = mm (in.)

MCL20 Type

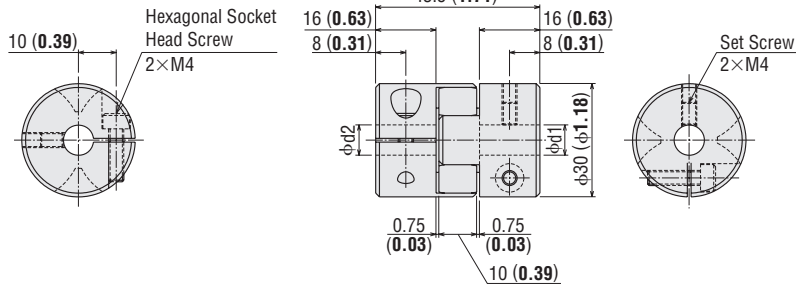
DXF A704



Shaft Hole Diameter [$\phi d1$, $\phi d2$]	Tolerance
F03: $\phi 4.762$ ($\phi 0.1875$) O6: $\phi 6$ ($\phi 0.2362$)	+0.018 0 ($\begin{smallmatrix} +0.0007 \\ 0 \end{smallmatrix}$)
F04: $\phi 6.35$ ($\phi 0.2500$) F05: $\phi 7.937$ ($\phi 0.3125$) O8: $\phi 8$ ($\phi 0.3150$)	+0.022 0 ($\begin{smallmatrix} +0.0009 \\ 0 \end{smallmatrix}$)

MCL30 Type

DXF A705



Shaft Hole Diameter [$\phi d1$, $\phi d2$]	Tolerance
F04: $\phi 6.35$ ($\phi 0.2500$) F05: $\phi 7.937$ ($\phi 0.3125$) O8: $\phi 8$ ($\phi 0.3150$) F06: $\phi 9.525$ ($\phi 0.3750$)	+0.022 0 ($\begin{smallmatrix} +0.0009 \\ 0 \end{smallmatrix}$)
F08: $\phi 12.7$ ($\phi 0.5000$)	+0.027 0 ($\begin{smallmatrix} +0.0011 \\ 0 \end{smallmatrix}$)

MCL3010F05

MCL3010F06

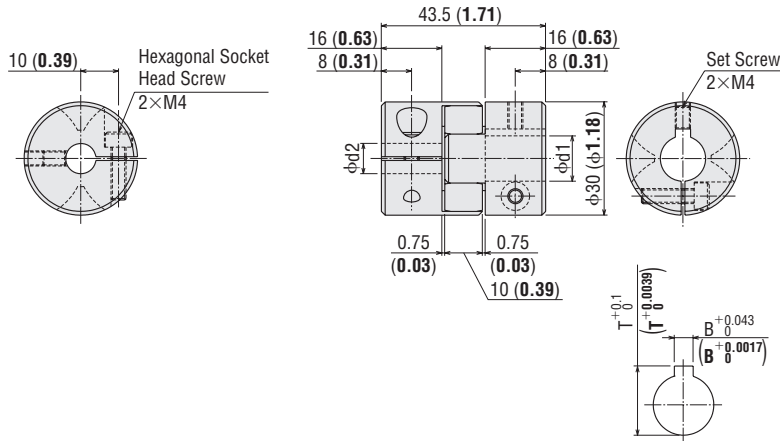
MCL3010F08

MCL3012F05

MCL3012F06

MCL3012F08

DXF A705



Shaft Hole Diameter [$\phi d1$]	Tolerance	Key Slot Width B	Key Slot Length T
10: $\phi 10$ ($\phi 0.3937$)	+0.022 0 ($\begin{smallmatrix} +0.0009 \\ 0 \end{smallmatrix}$)	4 (0.1575)	11.8 (0.465)
12: $\phi 12$ ($\phi 0.4724$)	+0.027 0 ($\begin{smallmatrix} +0.0011 \\ 0 \end{smallmatrix}$)		13.8 (0.543)

Shaft Hole Diameter [$\phi d2$]	Tolerance
F05: $\phi 7.937$ ($\phi 0.3125$) F06: $\phi 9.525$ ($\phi 0.3750$)	+0.022 0 ($\begin{smallmatrix} +0.0009 \\ 0 \end{smallmatrix}$)
F08: $\phi 12.7$ ($\phi 0.5000$)	+0.027 0 ($\begin{smallmatrix} +0.0011 \\ 0 \end{smallmatrix}$)

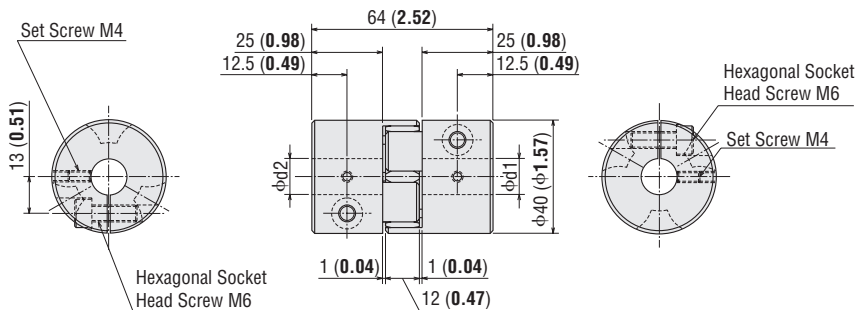
MCL40F05F06

MCL40F06F06

MCL40F06F08

MCL40F08F08

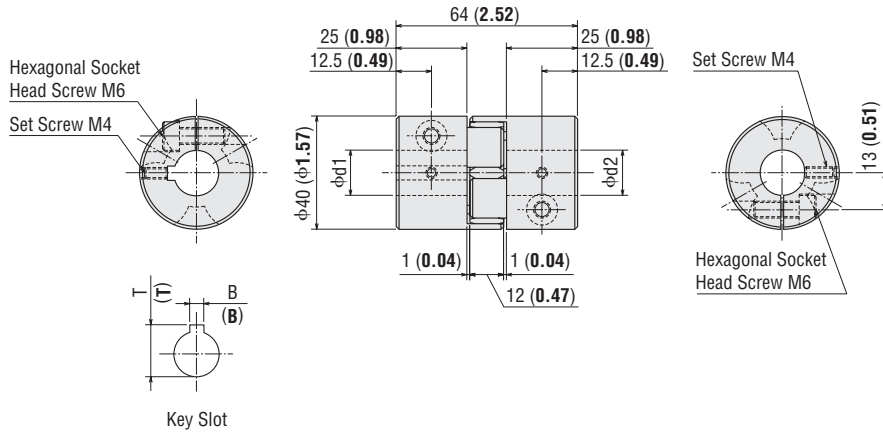
DXF A706



Shaft Hole Diameter [$\phi d1$, $\phi d2$]	Tolerance
F05: $\phi 7.937$ ($\phi 0.3125$) F06: $\phi 9.525$ ($\phi 0.3750$)	+0.022 0 ($\begin{smallmatrix} +0.0009 \\ 0 \end{smallmatrix}$)
F08: $\phi 12.7$ ($\phi 0.5000$)	+0.027 0 ($\begin{smallmatrix} +0.0011 \\ 0 \end{smallmatrix}$)

MCL4010F05
MCL4010F06
MCL4010F08
MCL4012F06
MCL4012F08
MCL40F08F10
MCL4014F06
MCL4014F08
MCL4015F06
MCL4015F08

DXF A706

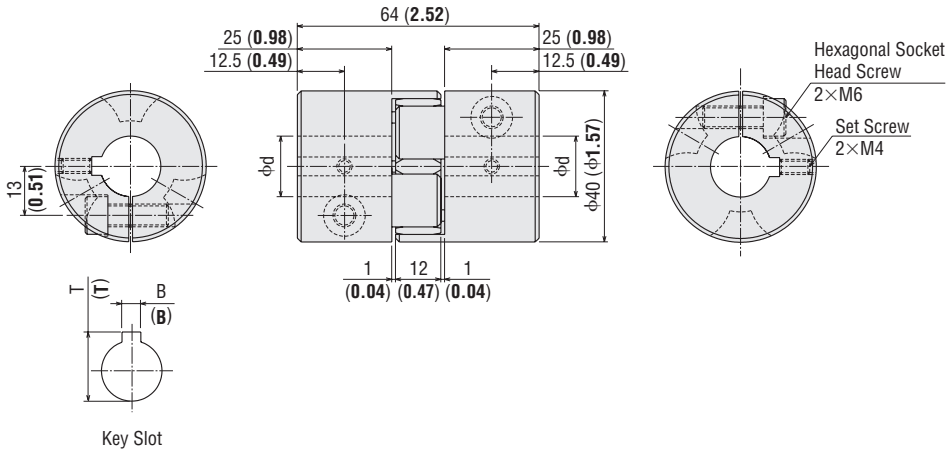


Shaft Hole Diameter [φd1]	Tolerance	Key Slot Width B	Tolerance	Key Slot Length T	Tolerance
10: φ10 (φ0.3937)	+0.022 0 (+0.0009 0)	4 (0.1575)	+0.043 0 (+0.0017 0)	11.8 (0.465)	+0.1 0 (+0.004 0)
12: φ12 (φ0.4724)	+0.027 0 (+0.0011 0)			13.8 (0.543)	
14: φ14 (φ0.5512)		5 (0.1969)	16.3 (0.642)		
15: φ15 (φ0.5906)			17.3 (0.681)		
F10: φ15.875 (φ0.6250)		4.763 (0.1875)	+0.051 0 (+0.0020 0)	18.009 (0.709)	

Shaft Hole Diameter [φd2]	Tolerance
F05: φ7.937 (φ0.3125)	+0.022 0 (+0.0009 0)
F06: φ9.525 (φ0.3750)	
F08: φ12.7 (φ0.5000)	+0.027 0 (+0.0011 0)

MCL4012F10
MCL4014F10
MCL4015F10
MCL40F10F10

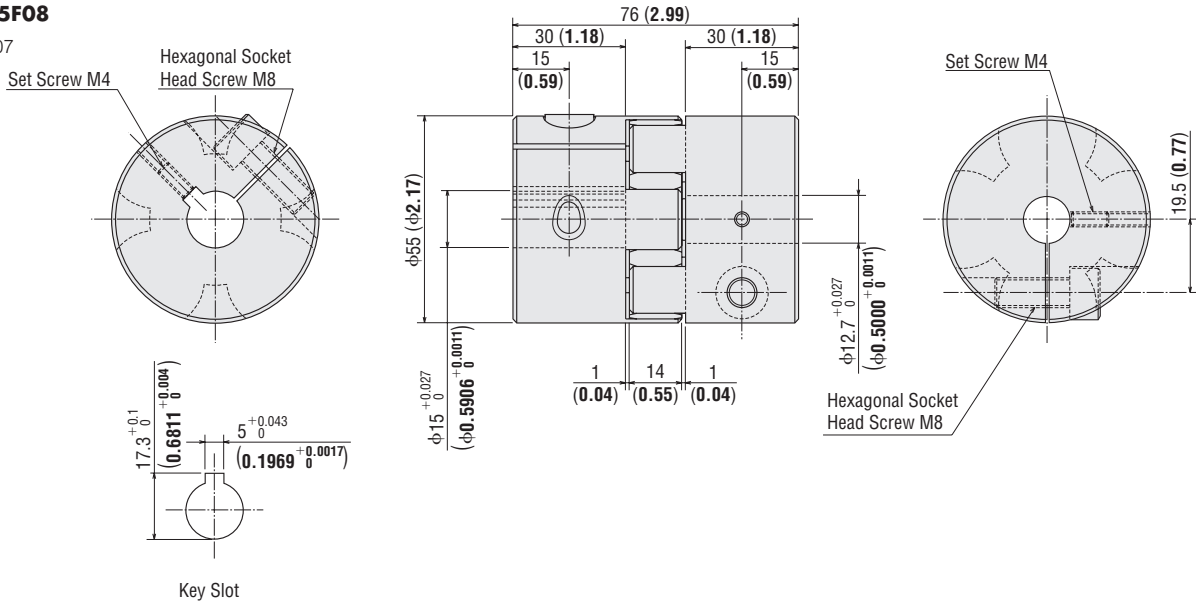
DXF A706



Shaft Hole Diameter (φd)	Tolerance	Key Slot Width B	Tolerance	Key Slot Length T	Tolerance
10: φ10 (φ0.3937)	+0.022 0 (+0.0009 0)	4 (0.1575)	+0.043 0 (+0.0017 0)	11.8 (0.465)	+0.1 0 (+0.004 0)
12: φ12 (φ0.4724)	+0.027 0 (+0.0011 0)			13.8 (0.543)	
14: φ14 (φ0.5512)		5 (0.1969)	16.3 (0.642)		
15: φ15 (φ0.5906)			17.3 (0.681)		
F10: φ15.875 (φ0.6250)		4.763 (0.1875)	+0.051 0 (+0.0020 0)	18.009 (0.709)	

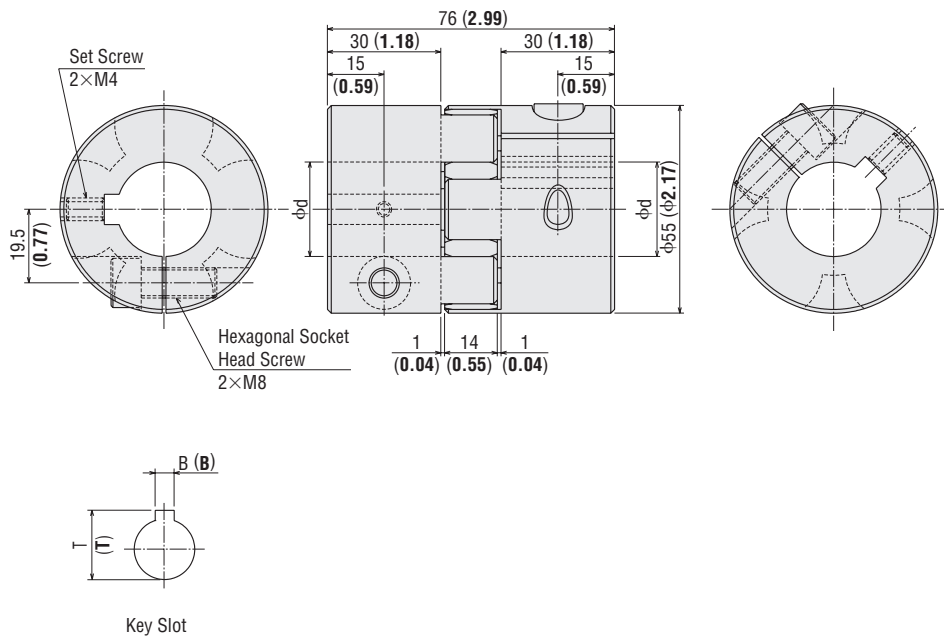
MCL515F08

DXF A707



MCL55 Type

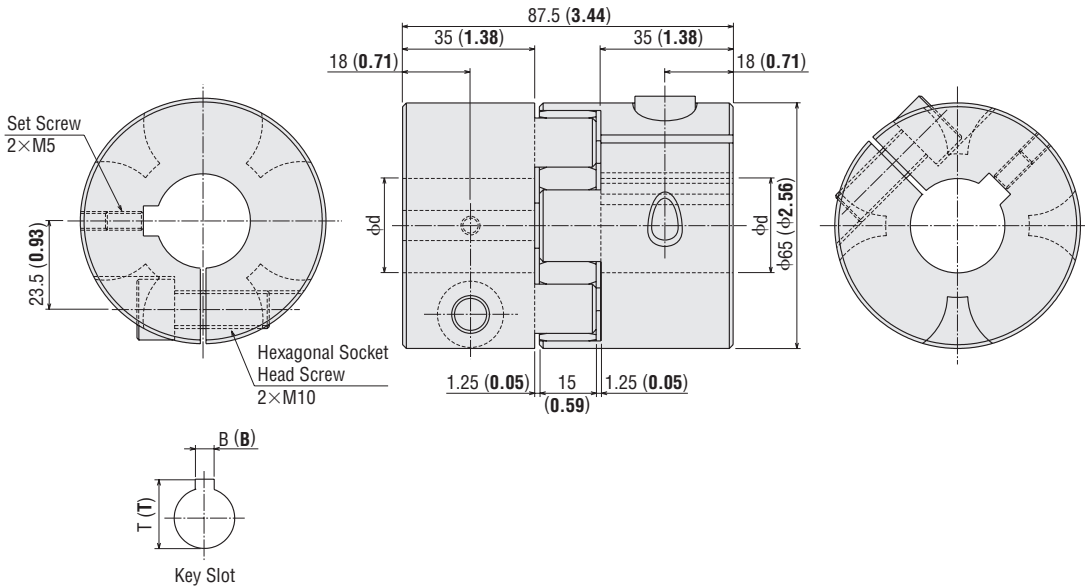
DXF A707



Shaft Hole Diameter (ϕd)	Tolerance	Key Slot Width B	Tolerance	Key Slot Length T	Tolerance
15: $\phi 15$ ($\phi 0.5906$)	$+0.027$ ($+0.0011$) 0	5 (0.1969)	$+0.043$ ($+0.0017$) 0	17.3 (0.681)	$+0.1$ ($+0.004$) 0
18: $\phi 18$ ($\phi 0.7087$)		6 (0.2362)	$+0.052$ ($+0.0020$) 0	20.8 (0.819)	
F10: $\phi 15.875$ ($\phi 0.6250$)	$+0.033$ ($+0.0013$) 0	4.763 (0.1875)	$+0.051$ ($+0.0020$) 0	18.009 (0.709)	$+0.254$ ($+0.010$) 0
F12: $\phi 19.050$ ($\phi 0.7500$)		4.763 (0.1875)		21.260 (0.837)	

MCL65 Type

DXF A708



Shaft Hole Diameter (ϕd)	Tolerance	Key Slot Width B	Tolerance	Key Slot Length T	Tolerance	
18: $\phi 18$ ($\phi 0.7087$)	$+0.027$ 0 ($+0.0011$ 0)	6 (0.2362)	$+0.052$ 0 ($+0.0020$ 0)	20.8 (0.819)	$+0.1$ 0 ($+0.004$ 0)	
F10: $\phi 15.875$ ($\phi 0.6250$)		4.763 (0.1875)		18.009 (0.709)		
F12: $\phi 19.05$ ($\phi 0.7500$)	$+0.033$ 0 ($+0.0013$ 0)	4.763 (0.1875)	$+0.051$ 0 ($+0.0020$ 0)	21.260 (0.837)	$+0.254$ 0 ($+0.010$ 0)	
20: $\phi 20$ ($\phi 0.7874$)		6 (0.2362)		22.8 (0.898)		$+0.1$ 0 ($+0.004$ 0)
22: $\phi 22$ ($\phi 0.8661$)		8 (0.3150)		24.8 (0.976)		
25: $\phi 25$ ($\phi 0.9843$)				28.3 (1.114)	$+0.2$ 0 ($+0.008$ 0)	

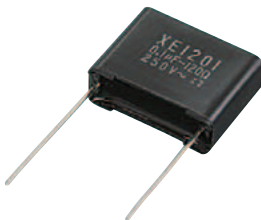
CR Circuit for Surge Suppression RoHS

This product is used to protect the contacts of the relay or switch used in the forward/reverse circuit section or the instantaneous stop circuit section of a motor.

Product Line

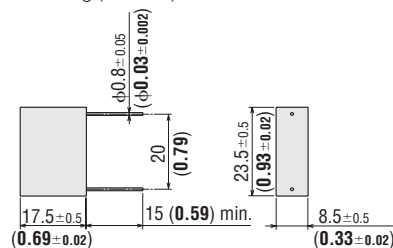
EPCR1201-2

250 VAC (120 Ω , 0.1 μ F)



Dimensions Unit = mm (in.)

Mass: 5 g (0.18 oz.)



Watertight Extension Cables RoHS

Use with the watertight power relay box. An extension of 5 m (16.4 ft.) and 10 m (32.8 ft.) is possible.

Product Line

Conductors	Model	Applicable Product	Cable Length L [m (ft.)]
4 Conductors	CC05AC43P	FPW Series	5 (16.4)
	CC10AC43P		10 (32.8)

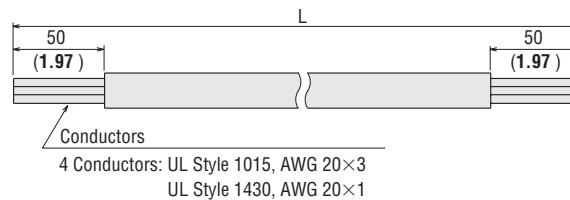
Specifications

Conductor construction: Refer to the dimension on the right

Finished outer diameter: $\phi 7.8$ mm ($\phi 0.31$ in.)

Outer casing: Heat-resistant vinyl chloride

Dimensions Unit = mm (in.)



Watertight Power Relay Box RoHS

Product Line

TB4-0608 (4-Terminal Type)



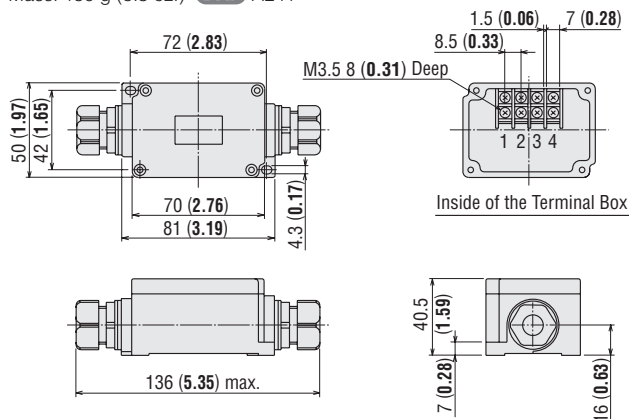
Applicable Products

- FPW Series**
- BH Series**

Applicable cable diameter: $\phi 6.5 \sim \phi 8.5$ mm ($\phi 0.26 \sim \phi 0.33$ in.)

Dimensions Unit = mm (in.)

Mass: 150 g (5.3 oz.) DXF A241



- The power relay box conforms to IP65 only when used with a extension cable for watertight type for **FPW Series**.
(Does not conform to IP65 when used with **BH Series**.)

Screws for the sealed connector and the cover of power relay box should be adjusted to the torque shown below.

- Sealed connector 1.0~1.5 N·m (8.8~13.2 lb-in)
- Cover of power relay box 0.54~0.66 N·m (4.7~5.8 lb-in)

- This product can be used with lead wire type. However, they are not watertight. Also, note that lead wires cannot be fixed with the sealed connectors.