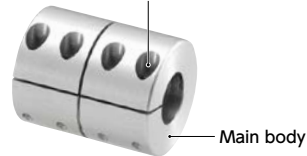


**Structure**

● Clamping type

**MLR-C** Made of aluminum alloy → P.221  
Hex Socket Head Cap Screw



**MLRS-C** Made of all stainless steel → P.221



● Semi-split type

**MLR-V** Made of aluminum alloy → P.223



**MLRS-V** Made of all stainless steel → P.223



● Recommended applicable motor

	MLR	MLRS
Servomotor	⊙	⊙
Stepping motor	⊙	⊙
General-purpose motor	—	—

⊙: Excellent   ○: Very good   △: Available

● Property

	MLR	MLRS
Zero Backlash	⊙	⊙
High Torque	○	○
High Torsional Stiffness	⊙	⊙
Corrosion Resistance (All S.S.)	—	⊙

⊙: Excellent   ○: Very good

- This is a long type rigid coupling.
- This can also be used as a joint for extending a shaft.
- There are two types of units made of aluminum alloy or stainless steel.
- There are clamping type and semi-split type.

● Application

Cleaning equipment/Transport device

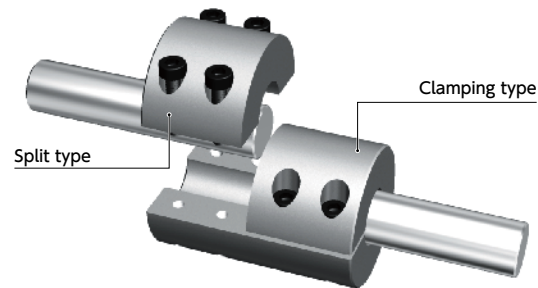
● Material/Finish



	MLR-C / MLR-V	MLRS-C / MLRS-V
Main Body	A2017 Alumite Treatment	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film	SUSXM7

● Semi-split type

Semi-split type is an attachment method in which one side of the hubs is clamping type and the other side is split type. While keeping one shaft attached on clamping side, the other shaft can be mounted or removed on split side, thus easier assembling set up.



● Related Products

Rigid coupling with high precision **XRP** is available. → P.207



● Part number specification

**MLR-16V-6-6**

Product Code   size   Bore Diameter

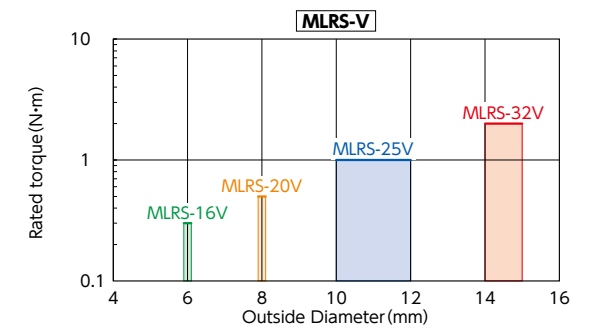
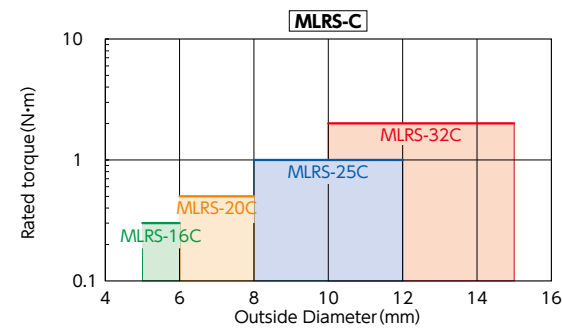
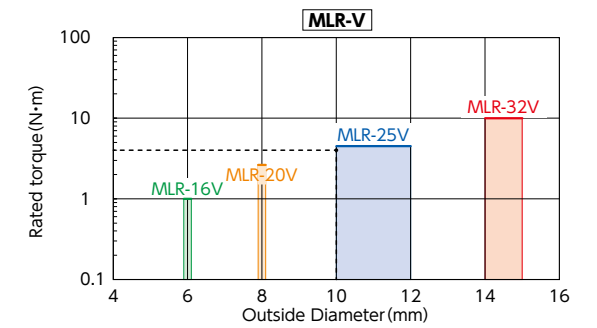
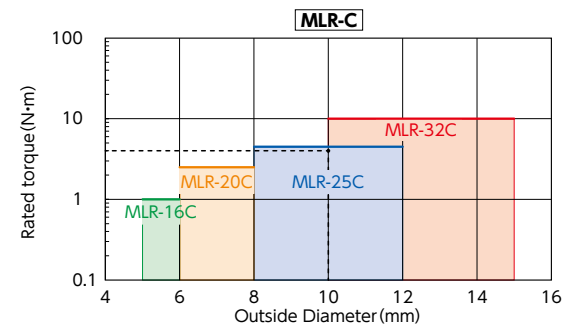
Please refer to dimensional table for part number specification.



**Selection**

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.



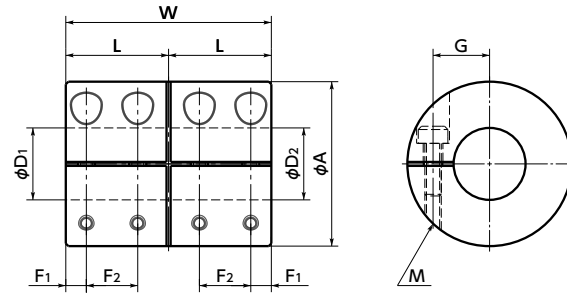
● Selection example

In case of selected parameters of shaft diameter of  $\phi 10$  and load torque of 4 N·m, the selected size is **MLR-25C** or **MLR-25V**.

# MLR-C / MLRS-C Rigid coupling - Clamping type

[WEB Selection Tool](#)
[WEB CAD Download](#)
[Zero Backlash](#)
[High Rigidity](#)
[SUS Stainless steel](#)

**MLR-C** Made of aluminum alloy  
**MLRS-C** Made of all stainless steel



## Dimensions

Unit : mm

Part Number	A	L	W	F1	F2	G	M	Screw Tightening Torque (N·m)	Standard Bore Diameter D1-D2								
									5 - 5	5 - 6	6 - 6	6 - 8	8 - 8	8 - 10	10 - 10	10 - 12	12 - 12
<b>MLR-16C</b>	16	11	22	2.5	5.5	5	M2	0.5	5 - 5	5 - 6	6 - 6						
<b>MLR-20C</b>	20	12	24	2.5	6	7	M2	0.5	6 - 6	6 - 8	8 - 8						
<b>MLR-25C</b>	25	18	36	4.5	9	9	M2.5	1	8 - 8	8 - 10	10 - 10	12 - 12					
<b>MLR-32C</b>	32	20	40	4	10	11	M3	1.5	10 - 10	10 - 12	10 - 14	12 - 12	12 - 14	14 - 14	15 - 15		
<b>MLRS-16C</b>	16	11	22	2.5	5.5	5	M2	0.5	5 - 5	5 - 6	6 - 6						
<b>MLRS-20C</b>	20	12	24	2.5	6	7	M2	0.5	6 - 6	6 - 8	8 - 8						
<b>MLRS-25C</b>	25	18	36	4.5	9	9	M2.5	1	8 - 8	8 - 10	10 - 10	12 - 12					
<b>MLRS-32C</b>	32	20	40	4	10	11	M3	1.5	10 - 10	10 - 12	10 - 14	12 - 12	12 - 14	14 - 14	15 - 15		

- All products are provided with hex socket head cap screws.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. → P.258

## Performance

Part Number	Max. Bore Diameter (mm)	Rated torque*1 (N·m)	Max. Rotational Frequency (min <sup>-1</sup> )	Moment of Inertia*2 (kg·m <sup>2</sup> )	Mass*2 (g)
<b>MLR-16C</b>	6	1	39000	3.4×10 <sup>-7</sup>	10
<b>MLR-20C</b>	8	2.5	31000	9.2×10 <sup>-7</sup>	18
<b>MLR-25C</b>	12	4.5	25000	3.4×10 <sup>-6</sup>	38
<b>MLR-32C</b>	15	10	19000	1.0×10 <sup>-5</sup>	70
<b>MLRS-16C</b>	6	0.3	39000	8.9×10 <sup>-7</sup>	25
<b>MLRS-20C</b>	8	0.5	31000	2.5×10 <sup>-6</sup>	45
<b>MLRS-25C</b>	12	1	25000	9.2×10 <sup>-6</sup>	100
<b>MLRS-32C</b>	15	2	19000	2.7×10 <sup>-5</sup>	180

- \*1 : Correction of rated torque due to load fluctuation is not required.
- \*2 : These are values with max. bore diameter.

[Additional Keyway at Shaft Hole → P.803](#)
[Cleanroom Wash & Packaging → P.807](#)
[SUS Change to Stainless Steel Screw → P.805](#)

Please feel free to contact us

Available / Add'l charge

Available / Add'l charge

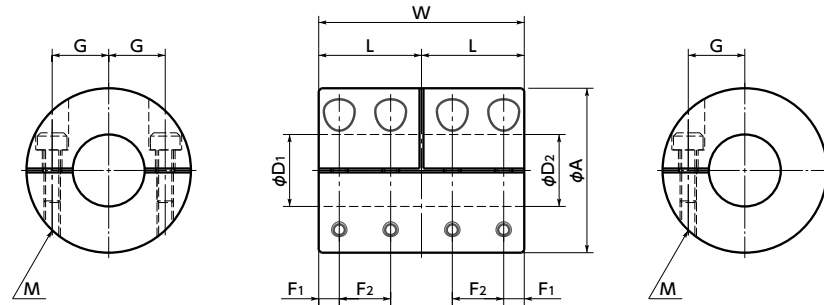
• Part number specification

**MLR-16C-5-5**

1

2

**MLR-V** Made of aluminum alloy  
**MLRS-V** Made of all stainless steel



## Dimensions

Unit : mm

Part Number <span style="color:red">◀1</span>	A	L	W	F1	F2	G	M	Screw Tightening Torque (N·m)	Standard Bore Diameter D1-D2 <span style="color:red">◀2</span>	
<b>MLR-16V</b>	16	11	22	2.5	5.5	5	M2	0.5	6 - 6	
<b>MLR-20V</b>	20	12	24	2.5	6	7	M2	0.5	8 - 8	
<b>MLR-25V</b>	25	18	36	4.5	9	9	M2.5	1	10 - 10	12 - 12
<b>MLR-32V</b>	32	20	40	4	10	11	M3	1.5	14 - 14	15 - 15
<b>MLRS-16V</b>	16	11	22	2.5	5.5	5	M2	0.5	6 - 6	
<b>MLRS-20V</b>	20	12	24	2.5	6	7	M2	0.5	8 - 8	
<b>MLRS-25V</b>	25	18	36	4.5	9	9	M2.5	1	10 - 10	12 - 12
<b>MLRS-32V</b>	32	20	40	4	10	11	M3	1.5	14 - 14	15 - 15

- All products are provided with hex socket head cap screws.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➔ P.258

## Performance

Part Number	Max. Bore Diameter (mm)	Rated torque*1 (N·m)	Max. Rotational Frequency (min <sup>-1</sup> )	Moment of Inertia*2 (kg·m <sup>2</sup> )	Mass*2 (g)
<b>MLR-16V</b>	6	1	39000	3.5×10 <sup>-7</sup>	10
<b>MLR-20V</b>	8	2.5	31000	9.5×10 <sup>-7</sup>	18
<b>MLR-25V</b>	12	4.5	25000	3.4×10 <sup>-6</sup>	38
<b>MLR-32V</b>	15	10	19000	1.0×10 <sup>-5</sup>	70
<b>MLRS-16V</b>	6	0.3	39000	9.1×10 <sup>-7</sup>	25
<b>MLRS-20V</b>	8	0.5	31000	2.6×10 <sup>-6</sup>	45
<b>MLRS-25V</b>	12	1	25000	9.3×10 <sup>-6</sup>	100
<b>MLRS-32V</b>	15	2	19000	2.8×10 <sup>-5</sup>	180

- \*1 : Correction of rated torque due to load fluctuation is not required.
- \*2 : These are values with max. bore diameter.

• Part number specification

**MLRS-20V - 8-8**

