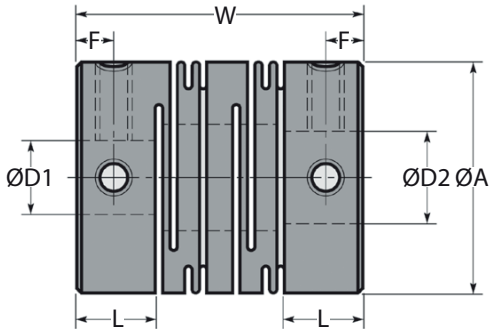
MST

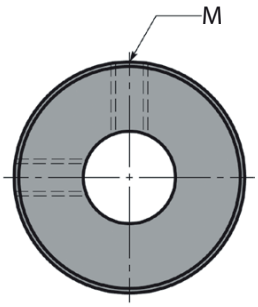
COUPLINGS

Miniature 8 Slit Flexible Shaft Coupling

Aluminium with Set Screw : 0.1 - 40Nm, 2 - 35mm Bores

MST





Part Number	Wrench Torque Nm	Rated Torque Nm	Max. Torque Nm	Max. rpm	Moment of Inertia* kg•m²	Static Torsional Stiffness Nm/rad	Errors of Eccentricity mm	Errors of Angularity	Errors of Shaft End-Play mm
MST-8	0.3	0.1	0.2	78,000	1.2×10^{-8}	25	0.10	2°	± 0.2
MST-12	0.5	0.2	0.4	52,000	8.3×10^{-8}	45	0.10	2°	± 0.3
MST-16	0.7	0.3	0.6	39,000	3.3×10^{-7}	80	0.10	2°	± 0.4
MST-20	0.7	0.5	1.0	31,000	9.0×10^{-7}	170	0.10	2°	± 0.4
MST-25	1.7	1.0	2.0	25,000	2.6×10^{-6}	380	0.15	2°	± 0.5
MST-32	1.7	2.0	4.0	19,000	9.6×10^{-6}	500	0.15	2°	± 0.5
MST-40	4.0	5.0	10.0	15,000	3.2×10^{-5}	700	0.20	2°	± 0.5
MST-50	7.0	10.0	20.0	12,000	1.0×10^{-4}	1,800	0.20	2°	± 0.5
MST-63	15.0	20.0	40.0	10,000	3.2×10^{-4}	3,100	0.20	2°	± 0.5

Part Number	Min. Bores ØD1	Min. Bores ØD2	Max. Bores ØD1 ØD2	ØA	L	W	F	M	Mass* g
MST-8	2	2.00	4	8	3.5	14.0	1.7	M2	1.4
MST-12	3	3.00	6	12	5.0	18.5	2.5	M2.5	3.7
MST-16	4	4.00	8	16	6.5	23.0	3.0	M3	8.1
MST-20	5	5.00	10	20	7.5	26.0	3.0	M3	14.0
MST-25	5	6.00	12	25	8.5	31.0	4.0	M4	27.0
MST-32	6	8.00	16	32	12.0	41.0	6.0	M4	60.0
MST-40	8	9.53	20	40	17.0	56.0	8.5	M5	130.0
MST-50	12	12.00	25	50	21.0	71.0	10.5	M6	260.0
MST-63	14	14.00	35	63	36.0	90.0	13.0	M8	490.0

The maximum torque of the miniature coupling is two-fold of the rated torque.
Select a type in which torque generated during continuous operation does not exceed the rated torque of the miniature coupling.
* Moment of Inertia and mass figures based on the maximum shaft bores.

Materials

Coupling: Anodized Aluminium alloy A2017.
Setscrew: SCM435, Black oxide coated (may be replaced with Stainless Steel).

Performance

Maximum Operating Temperature: 100°C. (approx.)

Ordering

e.g.

MST-25 - 8 – 10

Type
ØD1
ØD2

Options

MST couplings can be bored out, but not keywayed.
Keywayed (MST-K) couplings are available on request by special order but a minimum order quantity may apply. P.O.A.
Finished products with two different end-bore diameters available.

Other Info

All sizes are supplied with setscrews (2 per hub except hubs with bore diameters of 4mm or less which have 1 setscrew).
Recommended tolerance on shaft diameters is h6 and h7.
Non-standard bores and keyways machined on request.

Important: Couplings and other rotational parts should be protected by covers for safety operation. Also, take note that operation under misalignment exceeding maximum values and excessive torque may result in shorter life of the coupling due to plastic deformation.

Features

- Suitable for stepper motors
- One-piece metallic spring coupling
- Zero backlash
- Absorption of angular misalignment and shaft end-play by spring action
- High torsional stiffness and response
- Identical clockwise & anti-clockwise rotational characteristics
- Maintenance-free, oil and chemical resistant.

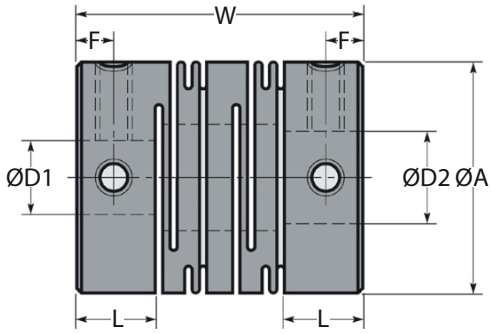
MSTS

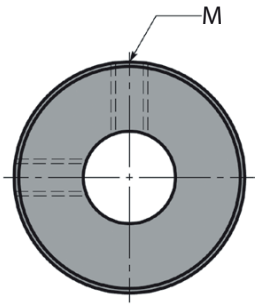
COUPLINGS

Miniature 8 Slit Flexible Shaft Coupling

Stainless Steel with Set Screw : 0.2 - 70Nm, 2 - 35mm Bores

MSTS





Part Number	Wrench Torque Nm	Rated Torque Nm	Max. Torque Nm	Max. rpm	Moment of Inertia* kg•m²	Static Torsional Stiffness Nm/rad	Errors of Eccentricity mm	Errors of Angularity	Errors of Shaft End-Play mm
MSTS-8	0.3	0.2	0.4	78,000	3.1×10^{-8}	50	0.10	2°	± 0.2
MSTS-12	0.5	0.3	0.6	52,000	2.1×10^{-8}	64	0.10	2°	± 0.3
MSTS-16	0.7	0.5	1.0	39,000	8.4×10^{-7}	85	0.10	2°	± 0.3
MSTS-20	0.7	1.0	2.0	31,000	2.4×10^{-6}	250	0.10	2°	± 0.3
MSTS-25	1.7	2.0	4.0	25,000	6.8×10^{-6}	330	0.15	2°	± 0.4
MSTS-32	1.7	3.5	7.0	19,000	2.6×10^{-5}	850	0.15	2°	± 0.5
MSTS-40	4.0	8.0	16.0	15,000	8.7×10^{-5}	1,000	0.20	2°	± 0.5
MSTS-50	7.0	15.0	30.0	12,000	2.7×10^{-4}	1,400	0.20	2°	± 0.5
MSTS-63	15.0	35.0	70.0	10,000	8.4×10^{-4}	1,800	0.20	2°	± 0.5

Part Number	Min. Bores ØD1	Min. Bores ØD2	Max. Bores ØD1 ØD2	ØA	L	W	F	M	Mass* g
MSTS-8	2	2.00	4	8	3.5	14.0	1.7	M2	3.0
MSTS-12	3	3.00	6	12	5.0	18.5	2.5	M2.5	9.3
MSTS-16	4	4.00	8	16	6.5	23.0	3.0	M3	21.0
MSTS-20	5	5.00	10	20	7.5	26.0	3.0	M3	38.0
MSTS-25	5	6.00	12	25	8.5	31.0	4.0	M4	71.0
MSTS-32	6	8.00	16	32	12.0	41.0	6.0	M4	160.0
MSTS-40	8	9.53	20	40	17.0	56.0	8.5	M5	350.0
MSTS-50	12	12.00	25	50	21.0	71.0	10.5	M6	700.0
MSTS-63	14	14.00	35	63	36.0	90.0	13.0	M8	1,300.0

The maximum torque of the miniature coupling is two-fold of the rated torque.
Select a type in which torque generated during continuous operation does not exceed the rated torque of the miniature coupling.
* Moment of Inertia and mass figures based on the maximum shaft bores.

Materials

Coupling: Stainless Steel (SUS303).
Setscrew: Stainless Steel (SUSXM7).

Performance

Maximum Operating Temperature: 100°C. (approx.)

Ordering

e.g. MSTS-25 - 8 – 10

Type
ØD1
ØD2

Options

MSTS couplings can be bored out, but not keywayed.
Finished products with two different end-bore diameters available.
Clean washed SUS304 Stainless Steel for special environment use available, P.O.A.

Other Info

All sizes are supplied with setscrews (2 per hub except hubs with bore diameters of 4mm or less which have 1 setscrew).
Recommended tolerance on shaft diameters is h6 and h7.
Non-standard bores and keyways machined on request.

Important: Couplings and other rotational parts should be protected by covers for safety operation. Also, take note that operation under misalignment exceeding maximum values and excessive torque may result in shorter life of the coupling due to plastic deformation.

Features

- Suitable for stepper motors
- One-piece metallic spring coupling
- Zero backlash
- Absorption of angular misalignment and shaft end-play by spring action
- High torsional stiffness and response
- Identical clockwise & anti-clockwise rotational characteristics
- Maintenance-free, oil and chemical resistant.

MST-C

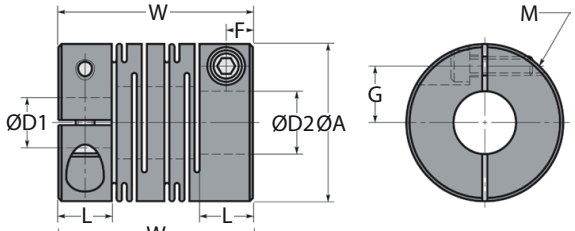
COUPLINGS

Miniature 8 Slit Flexible Shaft Coupling

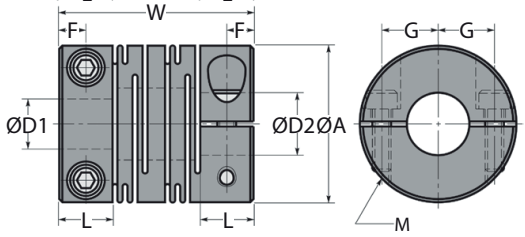
Aluminium Clamp Fixing : 0.2 - 40Nm, 4 - 30mm Bores

MST-C

MST-12C to MST-32C



MST-40C to MST-63C



Part Number	Wrench Torque Nm	Rated Torque Nm	Max. Torque Nm	Max. rpm	Moment of Inertia* kg•m²	Static Torsional Stiffness Nm/rad	Errors of Eccentricity mm	Errors of Angularity	Errors of Shaft End-Play mm
MST-12C	0.5	0.4	0.8	52,000	7.8×10^{-8}	45	0.10	2°	± 0.3
MST-16C	1.0	0.5	1.0	39,000	3.4×10^{-7}	80	0.10	2°	± 0.4
MST-20C	1.0	1.0	2.0	31,000	9.1×10^{-7}	170	0.10	2°	± 0.4
MST-25C	1.5	2.0	4.0	25,000	2.6×10^{-6}	380	0.15	2°	± 0.5
MST-32C	2.5	4.0	8.0	19,000	9.7×10^{-6}	500	0.15	2°	± 0.5
MST-40C	4.0	8.0	16.0	15,000	3.3×10^{-5}	700	0.20	2°	± 0.5
MST-50C	8.0	16.0	32.0	12,000	1.0×10^{-4}	1,800	0.20	2°	± 0.5
MST-63C	16.0	32.0	64.0	10,000	3.2×10^{-4}	3,100	0.20	2°	± 0.5

Part Number	Min. Bores ØD1	Min. Bores ØD2	Max. Bores ØD1 ØD2	ØA	L	W	F	G	M	Mass* g
MST-12C	4.0	4	5	12	5.0	18.5	2.50	4.0	M2	3.6
MST-16C	4.5	5	6	16	6.5	23.0	3.25	5.0	M2.5	9.2
MST-20C	5.0	6	8	20	7.5	26.0	3.75	6.5	M2.5	16.0
MST-25C	5.0	6	10	25	8.5	31.0	4.25	9.0	M3	28.0
MST-32C	8.0	8	14	32	12.0	41.0	6.00	11.0	M4	64.0
MST-40C	8.0	8	18	40	17.0	56.0	8.50	14.0	M5	140.0
MST-50C	12.0	14	22	50	21.0	71.0	10.50	18.0	M6	270.0
MST-63C	14.0	14	30	63	26.0	90.0	13.00	24.0	M8	530.0

The maximum torque of the miniature coupling is two-fold of the rated torque.
Select a type in which torque generated during continuous operation does not exceed the rated torque of the miniature coupling.
* Moment of Inertia and mass figures based on the maximum shaft bores.

Materials

Coupling: Anodized Aluminium alloy A2017.
Setscrew: SCM435, Black oxide coated (may be replaced with Stainless Steel).

Performance

Maximum Operating Temperature: 100°C. (approx.)

Ordering

e.g. MST-25C - 8 – 10

Type
ØD1
ØD2

Options

MSTS couplings can be bored out, but not keywayed.
Finished products with two different end-bore diameters available.

Other Info

All sizes are supplied with cap screws.
Recommended tolerance on shaft diameters is h6 and h7.
Non-standard bores and keyways machined on request.

Important: Couplings and other rotational parts should be protected by covers for safety operation. Also, take note that operation under misalignment exceeding maximum values and excessive torque may result in shorter life of the coupling due to plastic deformation.

Features

- Suitable for stepper motors
- One-piece metallic spring coupling
- Zero backlash
- Absorption of angular misalignment and shaft end-play by spring action
- High torsional stiffness and response
- Identical clockwise & anti-clockwise rotational characteristics
- Maintenance-free, oil and chemical resistant.

MSTS-C

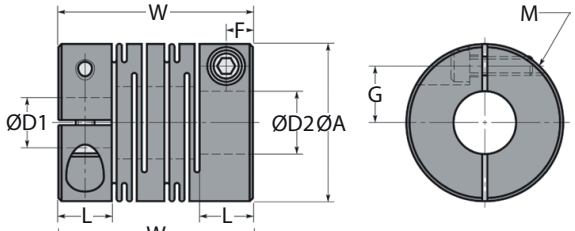
COUPLINGS

Miniature 8 Slit Flexible Shaft Coupling

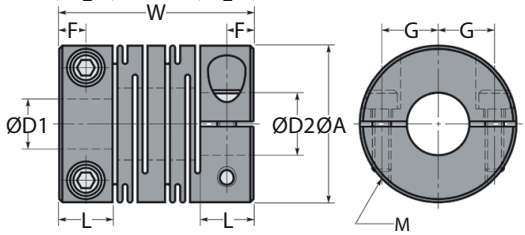
Stainless Steel Clamp Fixing : 0.3 - 35Nm, 4 - 30mm Bores

MSTS-C

MSTS-12C to MSTS-32C



MSTS-40C to MSTS-63C



Part Number	Wrench Torque Nm	Rated Torque Nm	Max. Torque Nm	Max. rpm	Moment of Inertia* kg•m²	Static Torsional Stiffness Nm/rad	Errors of Eccentricity mm	Errors of Angularity	Errors of Shaft End-Play mm
MSTS-12C	0.5	0.3	0.6	52,000	2.2×10^{-7}	64	0.10	2°	± 0.2
MSTS-16C	1.0	0.5	1.0	39,000	9.0×10^{-7}	85	0.10	2°	± 0.3
MSTS-20C	1.0	1.0	2.0	31,000	2.5×10^{-6}	250	0.10	2°	± 0.3
MSTS-25C	1.5	2.0	4.0	25,000	7.1×10^{-6}	330	0.15	2°	± 0.4
MSTS-32C	2.5	3.5	7.0	19,000	2.7×10^{-5}	850	0.15	2°	± 0.5
MSTS-40C	4.0	8.0	16.0	15,000	9.0×10^{-5}	1,000	0.20	2°	± 0.5
MSTS-50C	8.0	15.0	30.0	12,000	2.8×10^{-4}	1,400	0.20	2°	± 0.5
MSTS-63C	16.0	35.0	70.0	10,000	8.8×10^{-4}	1,800	0.20	2°	± 0.5

Part Number	Min. Bores ØD1	Min. Bores ØD2	Max. Bores ØD1 ØD2	ØA	L	W	F	G	M	Mass* g
MSTS-12C	4.0	4	5	12	5.0	18.5	2.50	4.0	M2	10
MSTS-16C	4.5	5	6	16	6.5	23.0	3.25	5.0	M2.5	25
MSTS-20C	5.0	6	8	20	7.5	26.0	3.75	6.5	M2.5	43
MSTS-25C	5.0	6	10	25	8.5	31.0	4.25	9.0	M3	78
MSTS-32C	8.0	8	14	32	12.0	41.0	6.00	11.0	M4	170
MSTS-40C	8.0	8	18	40	17.0	56.0	8.50	14.0	M5	370
MSTS-50C	12.0	14	22	50	21.0	71.0	10.50	18.0	M6	750
MSTS-63C	14.0	14	30	63	26.0	90.0	13.00	24.0	M8	1,400

The maximum torque of the miniature coupling is two-fold of the rated torque.
Select a type in which torque generated during continuous operation does not exceed the rated torque of the miniature coupling.
* Moment of Inertia and mass figures based on the maximum shaft bores.

Materials

Coupling: Stainless Steel (SUS303).
Setscrew: Stainless Steel (SUSXM7).

Performance

Maximum Operating Temperature: 100°C. (approx.)

Ordering

e.g. MSTS-25C - 8 – 10

Type
ØD1
ØD2

Options

MSTS-C couplings can be bored out, but not keywayed.
Finished products with two different end-bore diameters available.
Clean washed SUS304 Stainless Steel for special environment use available, P.O.A.

Other Info

All sizes are supplied with cap screws.
Recommended tolerance on shaft diameters is h6 and h7.
Non-standard bores and keyways machined on request.

Important: Couplings and other rotational parts should be protected by covers for safety operation. Also, take note that operation under misalignment exceeding maximum values and excessive torque may result in shorter life of the coupling due to plastic deformation.

Features

- Suitable for stepper motors
- One-piece metallic spring coupling
- Zero backlash
- Absorption of angular misalignment and shaft end-play by spring action
- High torsional stiffness and response
- Identical clockwise & anti-clockwise rotational characteristics
- Maintenance-free, oil and chemical resistant.