

Positioning Switches

Compact / Normally Open

Features: O.D. is M5 or Ø5, overall length is 17 mm, (Regular) Compact Contact Switches

Positioning Switches – Compact

RoHS 10

Bolt

Regular (IP40)
CMST
N-CMST with LED

Water-Proof (IP67)
CMSTW
N-CMSTW with LED

Standard
Regular (IP40)
CMSC
N-CMSC with LED

Water-Proof (IP67)
CMSCW
N-CMSCW with LED

Water-Proof (IP67)
CMSTW
N-CMSTW with LED

Water-Proof (IP67)
CMSCW
N-CMSCW with LED

Contact Part		Main Body		Cable	Accessories
Material	Hardness	Material	Material		
420 Stainless Steel	45 HRC min.	303 Stainless Steel	303 Stainless Steel	Cable 2m Ø3 Oil-resistant Min. Bending Radius R7	Hex Nuts 2 pcs. (Thickness 2.4, Wrench Size 7)

Bolt

Part Number Type	Stroke	Operating Point	Contact Force N	Contact Mechanism
Regular (IP40) CMST N-CMST	1.5	No Pre-Travel (Repeatability 0.003)	0.5N	NC (Normally Closed)
Water-Proof (IP67) CMSTW N-CMSTW			0.8N	

Standard

Part Number Type	Stroke	Operating Point	Contact Force N	Contact Mechanism
Regular (IP40) CMSC N-CMSC	1.5	No Pre-Travel (Repeatability 0.003)	0.5N	NC (Normally Closed)
Water-Proof (IP67) CMSCW N-CMSCW			0.8N	

Part Number Example **Part Number**
Example **CMST**

For Mechanical / Electrical Specifications and Precautions for Use, refer to P2188.

Positioning Switches – Normally Open (NO)

RoHS 10

Regular (IP65)
CMSM
N-CMSM with LED

Water-Proof (IP67)
CMSMW
N-CMSMW with LED

Contact Part		Main Body		Cable	Accessories
Material	Hardness	Material	Material		
Stainless Steel	50 HRC min.	303 Stainless Steel	303 Stainless Steel	Cable 2m Ø3 Oil-Resistant Min. Bending Radius R7	Wrench Hexagon Nut (Thickness 3, Wrench Size 13)

NO (Normally Open) Type

Part Number Type	Stroke	Operating Point	Contact Force N	Contact Mechanism
Regular (IP65) CMSM	1.5	0.3 from Tip (Repeatability 0.003)	1N	NO (Normally Open)
Water-Proof (IP67) CMSMW				

Part Number Example **Part Number**
Example **CMSMW**

High Accuracy Positioning Switches

Bolt / Shape Selectable / Flat

For Mechanical / Electrical Specifications and Precautions for Use, refer to P2188.

High Accuracy Positioning Switches – Bolt (IP67)

RoHS 10

3 mm Stroke **MSTK**
10 mm Stroke **MSTKL**

N-MSTK-D with Led
N-MSTKL-D with Led

Contact Part		Main Body		Cable	Accessories
Material	Hardness	Material	Material		
Carbide	1300~1600 HV min.	303 Stainless Steel	303 Stainless Steel	Cable 3m, 2-Conductors Ø5, Oil Resistant Min. Bending Radius R7	Hex Nut 2 pcs. (Thickness 3 Hex Socket 13)

Use within the contact ratings.
Do not pull or twist the cable with 30N or more.

Part Number	Contact Mechanism	Stroke S	Operating Point	Repeatability	Contact Force N	L ₁	L ₂	I
MSTK N-MSTK-D	NC = Normally Closed	3	No Pre-Travel	0.0005	1	15	23.2	18.2
	NO = Normally Open		0.2					
MSTKL N-MSTKL-D	NC = Normally Closed	10	No Pre-Travel			26	40	23

High Accuracy Positioning Switches – Shape Selectable (IP67)

RoHS 10

3 mm Stroke **MSTA**
10 mm Stroke **MSTAL**

N-MSTA-D with Led
N-MSTAL-D with Led

Tip Shape Selection

Tip Shapes

F Carbide Flat Type

Opposite Side 5
Opposite Angle 5.8

N Carbide Needle Type

Carbide Ball Ø1
Opposite Side 5
Opposite Angle 5.8

Use within the contact ratings.
Do not pull or twist the cable with a force of 30 N or more.

Contact Part		Main Body		Cable	Accessories
Material	Hardness	Material	Material		
Carbide	1300~1600 HV min.	303 Stainless Steel	303 Stainless Steel	Cable 3m, 2-Conductors Ø5, Oil Resistant Min. Bending Radius R7	Hexagon Nuts 2 pcs. (Thickness 3 Wrench Size 13)

Part Number Type	Tip Shapes	Contact Mechanism	Stroke S	Operating Point	Repeatability	Contact Force N	L ₁	L ₂	I
MSTA N-MSTA-D	F	NC = Normally Closed	3	No Pre-Travel	0.0005	1	20.5	23.2	18.2
		NO = Normally Open		0.2					
MSTAL N-MSTAL-D	N	NC = Normally Closed	10	No Pre-Travel			31.5	40	23

For Mechanical / Electrical Specifications and Precautions for Use, refer to P2188.

High Accuracy Positioning Switches – Flat (IP67)

RoHS 10

MSTTNA-A

MSTTNA-B

Use within the contact ratings.
Do not pull or twist the cable with a force of 30N or more.

Contact Part		Main Body		Cable
Material	Hardness	Material	Surface Treatment	
Carbide	1300~1600 HV min.	Aluminum	Clear Anodize	Cable 3m, 2-Conductors Ø5, Oil Resistant Min. Bending Radius R7

Part Number	Contact Mechanism	Stroke S	Operating Point	Contact Force N	d
MSTTNA-A	NC = Normally Closed	3	No Pre-Travel (Repeatability 0.0005)	1.5	M4
MSTTNA-B	Closed				Ø4.6

(All Types)

⚠ Force must be applied normal to the switch. (Declination within ±3°)

Part Number Example **Part Number** **Contact Mechanism**

Example **MSTK** - NC

N-MSTA-DF - NC

MSTTNA-A - NC