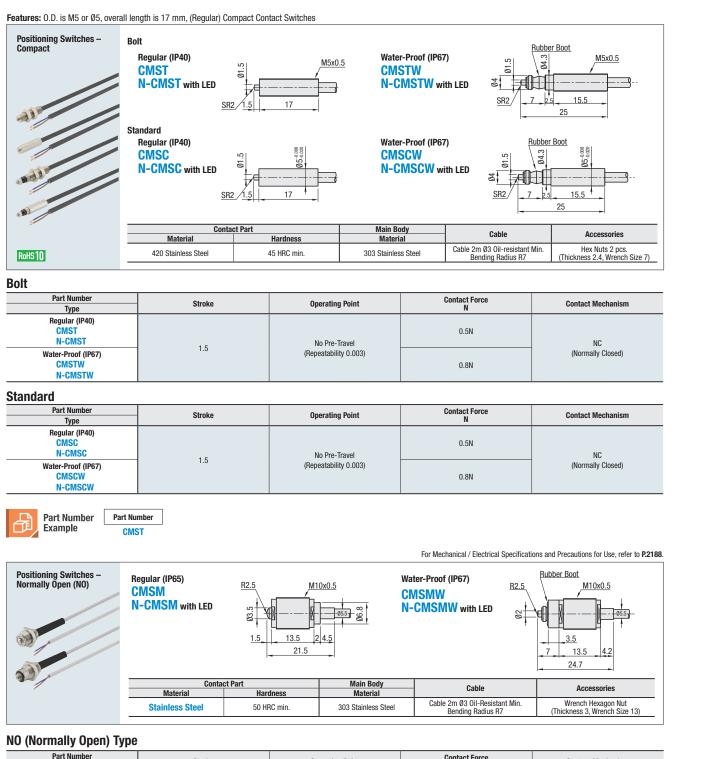
Positioning Switches

Compact / Normally Open



Part Number Type	Stroke	Operating Point	Contact Force N	Contact Mechanism
Regular (IP65) CMSM	15	0.3 from Tip	41	NO
Water-Proof (IP67) CMSMW	1.5	(Repeatability 0.003)	1N	(Normally Open)

Part Number Part Number Example CMSMW

High Accuracy Positioning Switches

Bolt / Shape Selectable / Flat

			_											
Bolt (IP67)	Positioning Switcl				MSTK Mstki	L					T <mark>K-D</mark> wit TKL-D w			
RoHS10			9	SR2		Silicon Rubber E		0x0.5		Sw 	vitch		NC: OFF NO: ON	D Lamp in Operation in Operation
				I	Materia	Contact Part I Hardne	\$5	Main Bo Materia			Cable		Acces	sories
 Use within the conta Do not pull or twist 	act ratings. the cable with 30N or	more.		-	Carbide			03 Stainles	e Stool		n, 2-Conductor Min. Bending I			t 2 pcs. Hex Socket 13)
Part Number	Contact Mec	hanisam	Stroke S	•	Operating F	Point Repea	tability	Conta	act Force N		L ₁	L ₂		I
MSTK N-MSTK-D	NC = Normall		3		No Pre-Tra 0.2	ivel					15	23.2 31		18.2 26
MSTKL N-MSTKL-D	NC = Normall		10		No Pre-Tra		005		1		26	40		23
RoHS 10				5.8	S_	Silicon Rubber E	M10x0	.5	09.3	Swi	itch	08.3	/NC: OFF	D Lamp in Operation in Operation
Tip Shapes	Type N (arhide Need		⊢ ➡ / Tip Shape] Use wi		L1 2	l L2	3	- -		120	<u>) </u>	7	
Tip Shapes F Carbide Flat		Carbide Need bide Ball Ø1		Use wi	Selection	L1 pontact ratings.	L2	1 30 N or		0-11-	<u> </u>) <u> 17</u>		
F Carbide Flat	Carl	bide Ball Ø1		Use wi Do not	Selection ithin the co t pull or twi	bontact ratings. ist the cable with Part I Hardness	L2	_	le 3m. 2-Cond	Cable ductors Ø5 iding Radiu	i. Oil Resistant	t H	AAccess lexagon Nu	
F Carbide Flat	ite Side 5	bide Ball Ø1	Ile Type	Use wi Do not Ma Ca	Selection ithin the co t pull or twi Contact iterial irbide	hardness 1300–1600 31	L2 a force o Main Body Material D3 Stainless	S Cabl	le 3m, 2-Cono Min. Ben Contact F	ductors Ø5 Iding Radiu	i. Oil Resistant	t H (Thick	AAccess lexagon Nu	ts 2 pcs.
F Carbide Flat	ite Side 5 te Angle 5.8 mber Tip Shapes	bide Ball Ø1	Ile Type	Use wi Do not Ma Ca	Selection ithin the cc t pull or twi Contact tterial irbide	L1 pontact ratings. ist the cable with Part I Hardness 1300–1600 3// HV min. Operating Point No Pre-Travel	L2 A force o Main Body Material D3 Stainless Steel	S Cabl	le 3m, 2-Cono Min. Ben	ductors Ø5 Iding Radiu	i, Oil Resistant us R7	t H (Thick	AAccess lexagon Nu iness 3 Wre	ts 2 pcs. ench Size 13) I 18.2
F Carbide Flat	ite Side 5	bide Ball Ø1	Ile Type	Use wi Do not Ma Ca	Selection ithin the co t pull or twi Contact tterial irbide	L1 L	L2 A force o Main Body Material D3 Stainless Steel	s Cabl	le 3m, 2-Cono Min. Ben Contact F	ductors Ø5 Iding Radiu	i, Oil Resistant us R7	t H (Thick	AAccess lexagon Nu kness 3 Wré	ts 2 pcs. ench Size 13)
F Carbide Flat	the Side 5 te Angle 5.8 mber Tip Shapes F	bide Ball Ø1	Ile Type	Use wi Do not Ma Ca	Selection ithin the cc t pull or twi Contact tterial irbide 3	L1 L	L2 a force o Main Body Material O3 Stainless Steel Repeat	s Cabl	le 3m, 2-Cond Min. Ben Contact F N	orce	i, Oil Resistant Is R7 L ₁ 20.5 31.5	t H (Thick	AAccess lexagon Nu kness 3 Wre L ₂ 3.2 31	ts 2 pcs. ench Size 13) I 18.2 26 23
F Carbide Flat	the Side 5 te Angle 5.8 mber Tip Shapes F	bide Ball Ø1	tle Type	Use wi Do not Ca Str	Selection ithin the cc t pull or twi Contact terial irbide	L1 L	L2 a a force o Main Body Material Steel Repeat 0.00	ability	le 3m, 2-Cond Min. Ben Contact F N	orce	i, Oli Resistant is R7 L ₁ 20.5 31.5 trical Specifica	t H (Thick 2: 3 4 ations and Prec	AAccess lexagon Nu kness 3 Wre L ₂ 3.2 31	ts 2 pcs. ench Size 13) I 18.2 26 23
F Carbide Flat	te Side 5 te Angle 5.8 mber Tip Shapes F N	bide Ball Ø1	tle Type	Use wi Do not Ma Ca	Selection ithin the cot to pull or twi Contact terial rbide	L1 L	L2 a a force o Main Body Material Steel Repeat 0.00	ability	le 3m, 2-Cont Min. Ben Contact F N 1 For Mechan	ductors Ø5 ding Radiu orce nical / Elect LED Lamp OFF in Opr <u>Sil</u> 2-d	i, Oli Resistant is R7 L ₁ 20.5 31.5 trical Specifica	t H (Thick 22 2 3 4 ations and Prec	AAccess lexagon Nu kness 3 Wre L ₂ 3.2 31 40 cautions for	ts 2 pcs. ench Size 13) I 18.2 26 23
F Carbide Flat	te Side 5 te Angle 5.8 mber Tip Shapes F N	bide Ball Ø1	tle Type	Use wi Do not Ca Str	Selection ithin the cot to pull or twi Contact terial rbide	Part I Hardness 1300-1600 3 HV min. 3 Operating Point No Pre-Travel 0.2 No Pre-Travel LED Lamp OFF in Operatio 2-d 0±0.1	L2 a a force o Main Body Material Steel Repeat 0.00	ability 1005 NA-B	le 3m, 2-Cont Min. Ben Contact F N 1 For Mechan	ductors Ø5 ding Radiu orce	i, Oil Resistant Is R7 L1 20.5 31.5 trical Specifica peration S Licon Rubber Bi	t H (Thick 22 3 4 ations and Prec	AAccess lexagon Numers 3 Wre L2 3.2 31 40 cautions for 9.5 10 20 20 20 20 20 20 20 20 20 20 20 20 20	ts 2 pcs. ench Size 13)
F Carbide Flat	ite Side 5 te Angle 5.8 Tip Shapes F N ositioning Switch	bide Ball Ø1	tle Type	Use wi Do not Ca Str	Selection ithin the cc pull or twi Contact terial rbide	LED Lamp OFF in Operation OFF in Operation OFF in Operation OFF in Operation OFF in Operation CF in Operation	L2 a a force o Main Body Material 33 Stainless Repeat 0.00 MSTT	ability 1005 NA-B	le 3m, 2-Cond Min. Ben Contact F N 1 For Mechan 1 For Mechan 1 U = 1 U = 1 U = 1 Clear A	ductors Ø5 diding Radiu orce iical / Elect LED Lamp OFF in Opr 2-d 0.1 reatment nodize	i, Oil Resistant is R7 L1 20.5 31.5 trical Specifica peration L1 Cable 3 S)	t H (Thick 22 3 4 ations and Prec 13.5 5 4 ations and Prec 3 3 4 ations and Prec 3 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 4 5 4 5	AAccess lexagon Nu tress 3 Wre 3.2 3.2 3.1 40 cautions for 9.5 10 10 cautions for 9.5 10 cautions for 10 cautions for 10 c	ts 2 pcs. ench Size 13)
F Carbide Flat	ite Side 5 te Angle 5.8 Tip Shapes F N ositioning Switch	bide Ball Ø1	Ile Type	Use wi Do not Ma Ca Str Str I I I I I I I I I I I I I I I I I I I	Selection ithin the cot to pull or twi Contact trerial irbide	L1 I Part I Hardness I 1300-1600 3i HV min. 3i Operating Point No Pre-Travel 0.2 No Pre-Travel 0.7 No Pre-Travel 0.7 No Pre-Travel 0.7 No Pre-Travel 0.2 No Pre-Travel 0.2 No Pre-Travel 0.2 No Pre-Travel 0.1 Et Part Hardness 1300-1600 HV min. Et Part Contact Force Contact Force	L2 a a force o Main Body Material 33 Stainless Repeat 0.00 MSTT	ability	le 3m, 2-Cond Min. Ben Contact F N 1 For Mechan 1 For Mechan 1 U = 1 U = 1 U = 1 Clear A	ductors Ø5 ding Radiu	i, Oil Resistant is R7 L1 20.5 31.5 trical Specifica peration L1 Cable 3 S)	t H (Thick 22 3 4 ations and Prec 13.5 5 4 ations and Prec 3 3 3 4 ations and Prec 3 3 3 4 ations and Prec 3 3 3 4 ations and Prec 3 3 4 ations and Prec 3 3 3 3 4 ations and Prec 3 3 3 3 4 ations and Prec 3 3 3 3 3 4 3 3 3 4 3 3 3 3 3 3 4 3	AAccess lexagon Nu mess 3 Wre L ₂ 3.2 3.1 40 6 6 6 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	ts 2 pcs. ench Size 13)
F Carbide Flat	ite Side 5 te Angle 5.8 Tip Shapes F N ositioning Switch Ositioning Switch	bide Ball Ø1	Ile Type	Use wi Do not Ma Ca Str Str I I I I I I I I I I I I I I I I I I I	Selection ithin the cotic pull or twi Contact terial rbide	Part I Hardness 1300–1600 3 HV min. Operating Point No Pre-Travel 0.2 No Pre-Travel 0.2 No Pre-Travel 0.2 No Pre-Travel 0.2 0FF in Operation Cortact Force N	L2 a a force o Main Body Material 33 Stainless Repeat 0.00 MSTT	ability 1005 NA-B S Main main d M4	le 3m, 2-Cond Min. Ben Contact F N 1 For Mechan 1 For Mechan 1 U = 1 U = 1 U = 1 Clear A	ductors Ø5 ding Radiu	i, Oil Resistant is R7 L1 20.5 31.5 trical Specifica peration icon Rubber B Cable 3 s) must be appli	t H (Thick 23 23 4 ations and Prec 13.5 5 13.5 5 13.5 13.5 13.5 14 ations and Prec 13.5 5 13.5 14 ations and Prec 13.5 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	AAccess lexagon Nu mess 3 Wre 3.2 31 40 cautions for 9.5 40 cautions for 9.5 7 cautions for 9.5 7 cautions for 9.5 7 cautions for 9.5 7 cautions for 9.5 7 cautions for 9.5 7 cautions for 10 cautions for 9.5 7 cautions	ts 2 pcs. ench Size 13)





