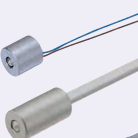
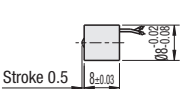
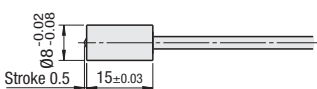

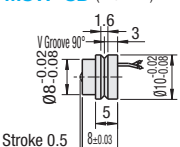
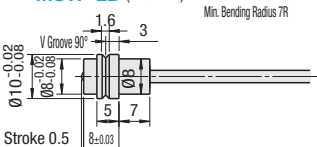

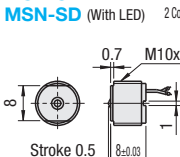
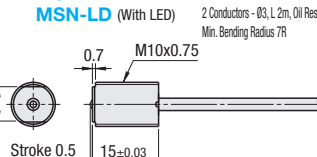

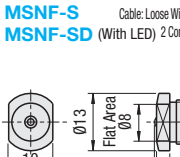
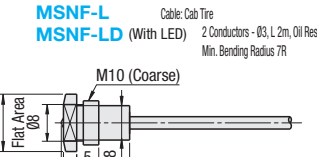

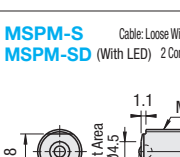
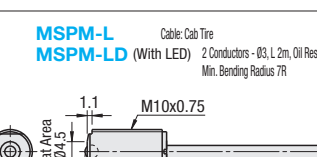


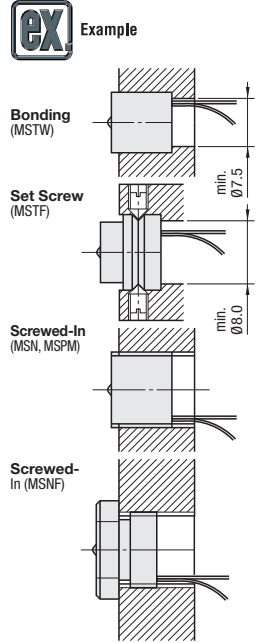
Contact Switches with Stoppers

Mini, Drip-Proof (IP44) /Water-Proof (IP67)

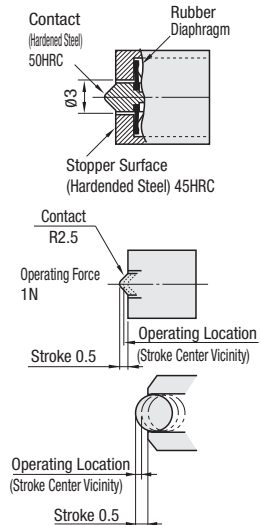
For Mechanical / Electrical Specifications and Precautions for Use, **P2095**

⚠ Although this is a drip-proof type, it is not suited for use in environment in which coolant or cutting chips may fall on the product.

Drip-Proof (IP44) Standard 	MSTW-S MSTW-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.5 	MSTW-L Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.5 
	Material: Main Body SUS416F (45HRC) Contact Part SUS420 (50HRC)	
Drip-Proof (IP44) Flanged Cylinder 	MSTF-S MSTF-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.5 	MSTF-L MSTF-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.5 
	Material: Main Body SUS416F (45HRC) Contact Part SUS420 (50HRC)	
Drip-Proof (IP44) Screw 	MSN-S MSN-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.5 	MSN-L MSN-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.5 
	Accessory (MSN-L, LD only): Hex Nut 2 pcs. (Thickness 3, Hex Socket 13) Material: Main Body SUS416F (45HRC) Contact Part SUS420 (50HRC)	
Drip-Proof (IP44) Flanged Screw 	MSNF-S MSNF-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.5 	MSNF-L MSNF-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.5 
	Accessory (MSPM-L, LD only): Hex Nut 2 pcs. (Thickness 3, Hex Socket 13) Material: Main Body SUS416F (45HRC) Contact Part SUS420 (50HRC)	
Drip-Proof (IP44) Ball Contact Screw 	MSPM-S MSPM-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.5 	MSPM-L MSPM-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.5 
	Accessory (MSPM-L, LD only): Hex Nut 2 pcs. (Thickness 3, Hex Socket 13) Material: Main Body SUS416F (45HRC) Ball SUS440C (50HRC)	




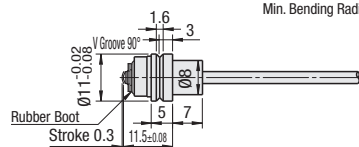

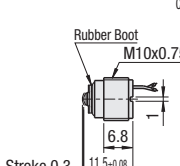
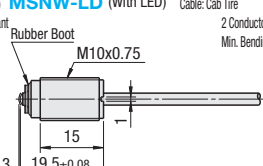

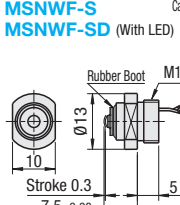
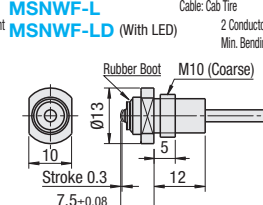
Structure of Drip-Proof Type (IP44)

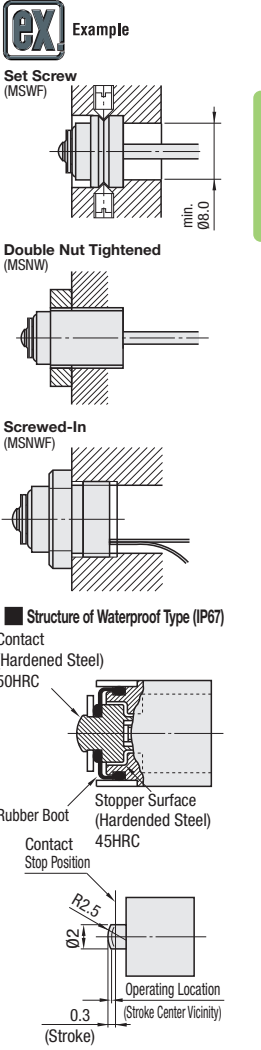


- Use within the contact ratings.
- Do not pull or twist the loose wires with 15N or more. Also do not pull or twist the cab tire cords with 30N or more.

Part Number Type	Stroke	Operating Point	Contact Force	Allowable Static Load	Max. Impact Energy	Contact Logic	-S		-SD		-L		-LD	
							Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
MSTW	0.5	Center Vicinity (Repeatability 0.01)	0.8N	3000N	0.2J	NO (Normally Open)	1 ~ 9 pc(s)	10 ~ 20	1 ~ 9 pc(s)	10 ~ 20	1 ~ 9 pc(s)	10 ~ 20	1 ~ 9 pc(s)	10 ~ 20
MSTF							-	-	-	-	-	-		
MSN							-	-	-	-	-	-		
MSNF							-	-	-	-	-	-		
MSPM							-	-	-	-	-	-		

⚠ Although this is a water-resisting type, it is not suited for use in environment in which coolant or dust from cutting may fall on the product. For Mechanical / Electrical Specifications and Precautions for Use, **P2095**

Waterproof (IP67), Flanged Cylinder 	MSWF-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.3 	Material: Main Body SUS416F (45HRC) Contact Part SUS420 (50HRC)
	Accessory (MSNF-L, LD only): Hex Nut 2 pcs. (Thickness 3, Hex Socket 13) Toothed Washer 1 pc.	
Waterproof (IP67), Screw 	MSNW-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.3 	MSNW-L MSNW-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.3 
	Accessory (MSNW-L, LD only): Hex Nut 2 pcs. (Thickness 3, Hex Socket 13) Toothed Washer 1 pc.	
Waterproof (IP67), Flanged Screw 	MSNWF-S MSNWF-SD (With LED) Cable: Loose Wire (No Thermal Compression Tube) 2 Conductors - Ø0.6, L 0.5m Oil Resistant Stroke 0.3 	MSNWF-L MSNWF-LD (With LED) Cable: Cab Tire 2 Conductors - Ø3, L 2m, Oil Resistant Min. Bending Radius 7R Stroke 0.3 
	Material: Main Body SUS416F (45HRC) Contact Part SUS420 (50HRC)	

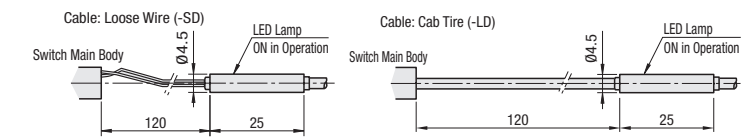


Part Number Type	Stroke	Operating Point	Contact Force	Allowable Static Load	Max. Impact Energy	Contact Logic	-S		-SD		-L		-LD	
							Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
MSWF	0.3	Center Vicinity (Repeatability 0.01)	1N	3000N	0.2J	NO (Normally Open)	-	-	-	-	-	-	-	-
MSNW							-	-	-	-	-	-		
MSNWF							-	-	-	-	-	-		
MSNWF							-	-	-	-	-	-		

Ordering Example

Part Number
MSTW-SD
MSTF-L
MSN-S
MSNF-L
MSPM-LD
MSNW-L
MSNWF-S

(Common to "with LED" Type)



- Use within the contact ratings.
- Do not pull or twist the loose wires with 15N or more. Also do not pull or twist the cab tire cords with 30N or more.

