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Pull-reset Safety Limit Switch

- A series of pull-reset models now available
- Lineup includes three contact models with 2NC/1NO and 3NC contact forms in addition to the previous contact forms 1NC/1NO and 2NC.
- M12-connector models are available, saving on labor and simplifying replacement.
- Standardized gold-clad contacts provide high contact reliability. Can be used with both standard loads and microloads.
- Conforms to EN115, EN81-1 and EN81-2.
- Certified standards: UL, EN (TÜV), and CCC



G



Specifications

Standards and EC Directives

Conforms to the following EC Directives:

- Machinery Directive
- Low Voltage Directive
- EN50047
- EN60204-1
- EN1088
- GS-ET-15

Certified Standards

Certification body	Standard	File No.
TÜV SÜD	EN 60947-5-1 (certified direct opening)	Consult your representative for details.
UL *1	UL 508, CSA C22.2 No.14	E76675
CQC (CCC) *2	GB14048.5	2004010305105973

*1.Certification for CSA C22.2 No. 14 is authorized by the UL mark.

*2.Only certain models have been certified.

Certified Standard Ratings

TÜV (EN 60947-5-1), CCC (GB14048.5)

Item	Utilization category	AC-15	DC-13
Rated operating current (Ie)		3 A	0.27 A
Rated operating voltage (Ue)		240 V	250 V

Note: Use a 10 A fuse type gI or gG that conforms to IEC 60269 as a short-circuit protection device. This fuse is not built into the Switch.

UL/CSA (UL 508, CSA C22.2 No. 14)
A300

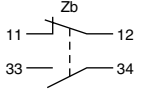
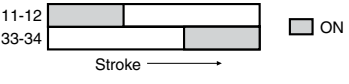
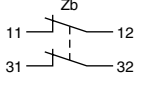
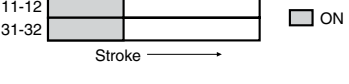
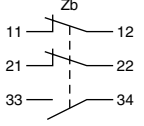
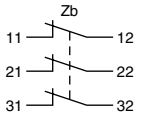
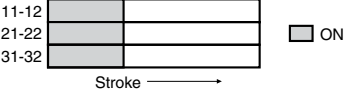
Rated voltage	Carry current	Current (A)		Volt-amperes (VA)	
		Make	Break	Make	Break
120 VAC	10 A	60	6	7,200	720
240 VAC		30	3		

Q300

Rated voltage	Carry current	Current (A)		Volt-amperes (VA)	
		Make	Break	Make	Break
125 VDC	2.5 A	0.55	0.55	69	69
250 VDC		0.27	0.27		

Connections

Contact Form

Model	Contact	Contact form	Operating pattern	Remarks
D4N-□A□R	1NC/1NO			Only NC contacts 11-12 have a certified direct opening mechanism. (→) The terminals 11-12 and 33-34 can be used as unlike poles.
D4N-□B□R	2NC			Only NC contacts 11-12 and 31-32 have a certified direct opening mechanism. (→) The terminals 11-12 and 31-32 can be used as unlike poles.
D4N-□C□R	1NC/1NO			Only NC contacts 11-12 and 21-22 have a certified direct opening mechanism. (→) The terminals 11-12, 21-22, and 33-34 can be used as unlike poles.
D4N-□D□R	3NC			Only NC contacts 11-12, 21-22, and 31-32 have a certified direct opening mechanism. (→) The terminals 11-12, 21-22, and 31-32 can be used as unlike poles.

G

(mm)

Dimensions

Switches

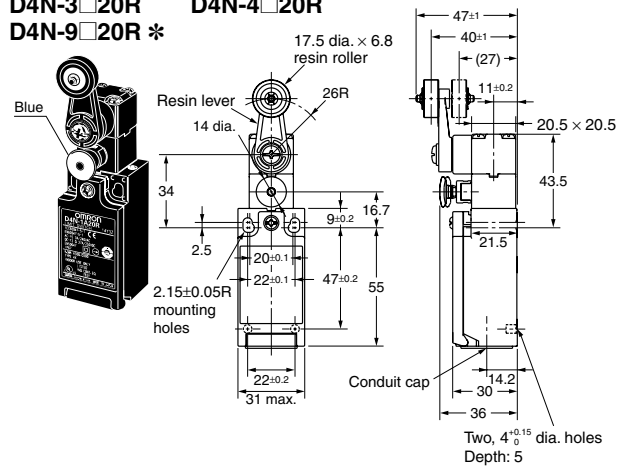
1-conduit Models

Roller Lever (Resin Lever, Resin Roller)

D4N-1□20R D4N-2□20R

D4N-3□20R D4N-4□20R

D4N-9□20R *

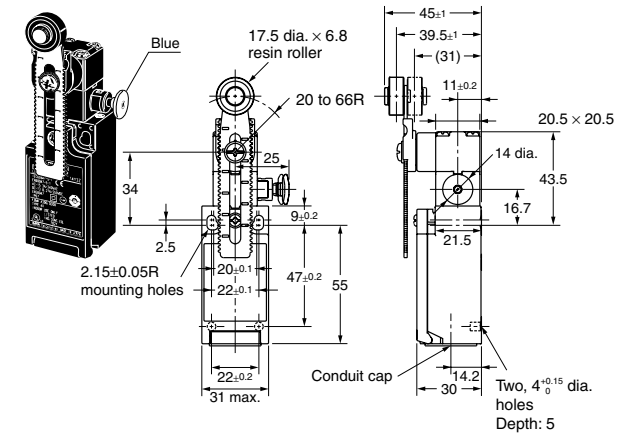


Adjustable Roller Lever, Form Lock (with Metal Lever, Resin Roller)

D4N-1□2GR D4N-2□2GR

D4N-3□2GR D4N-4□2GR

D4N-9□2GR *

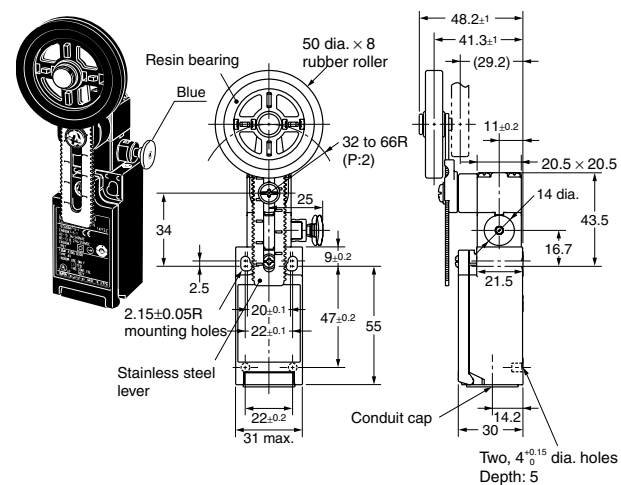


Adjustable Roller Lever, Form Lock (with Metal Lever, Rubber Roller)

D4N-1□2HR D4N-2□2HR

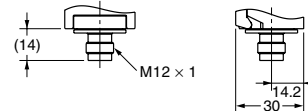
D4N-3□2HR D4N-4□2HR

D4N-9□2HR *



1-conduit M12 Connector

D4N-9□□□R



Note: Each dimension has a tolerance of 0.4 mm unless otherwise specified.
*Refer to the 1-conduit M12 Connector diagram for details.

Dimensions (continued)

(mm)

Switches

1-conduit Models

Plunger

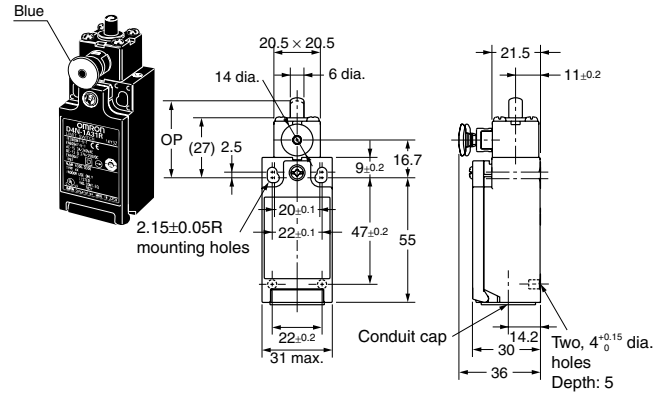
D4N-1□31R

D4N-2□31R

D4N-3□31R

D4N-4□31R

D4N-9□31R *



Roller Plunger

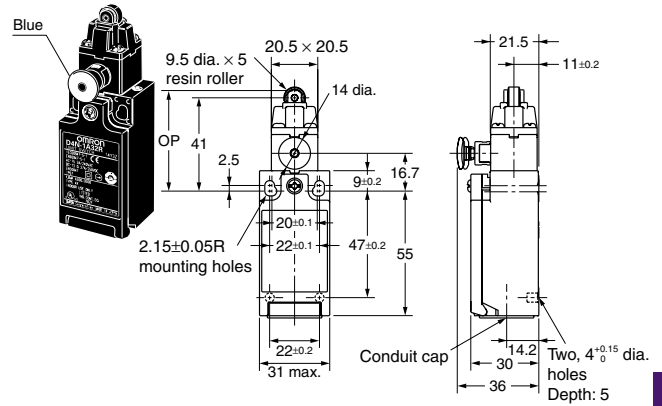
D4N-1□32R

D4N-2□32R

D4N-3□32R

D4N-4□32R

D4N-9□32R *

One-way Roller Arm Lever
(Horizontal)

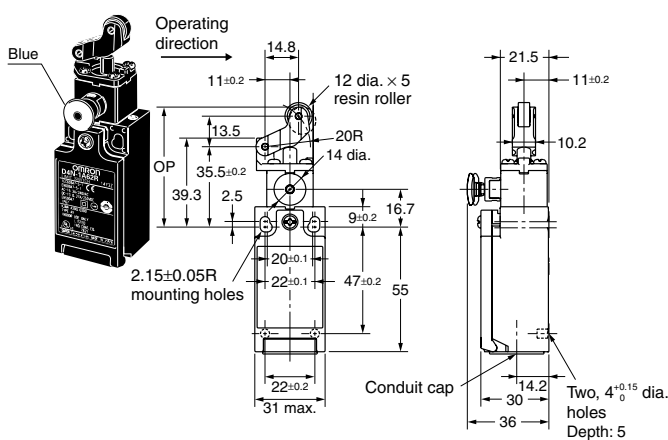
D4N-1□62R

D4N-2□62R

D4N-3□62R

D4N-4□62R

D4N-9□62R *

One-way Roller Arm Lever
(Vertical)

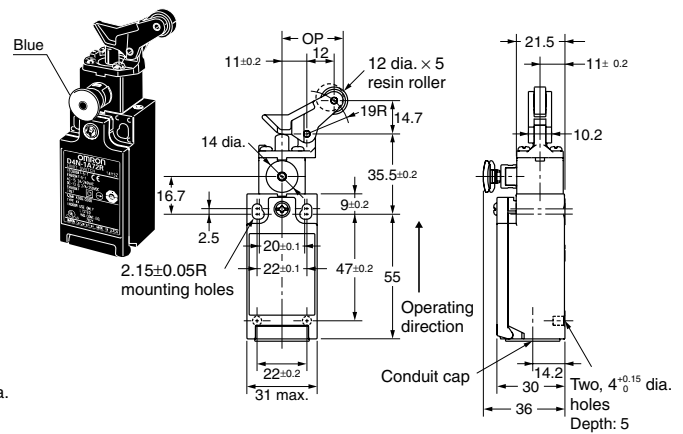
D4N-1□72R

D4N-2□72R

D4N-3□72R

D4N-4□72R

D4N-9□72R *



Note: Each dimension has a tolerance of 0.4 mm unless otherwise specified.
 *Refer to the 1-conduit M12 Connector diagram for details.

Dimensions (continued)

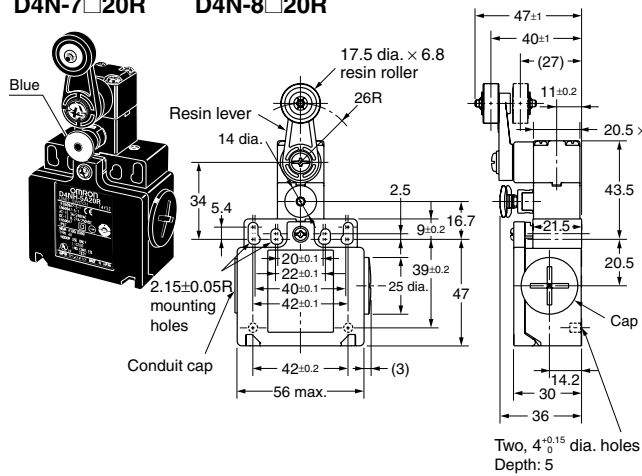
(mm)

Switches

2-conduit Models

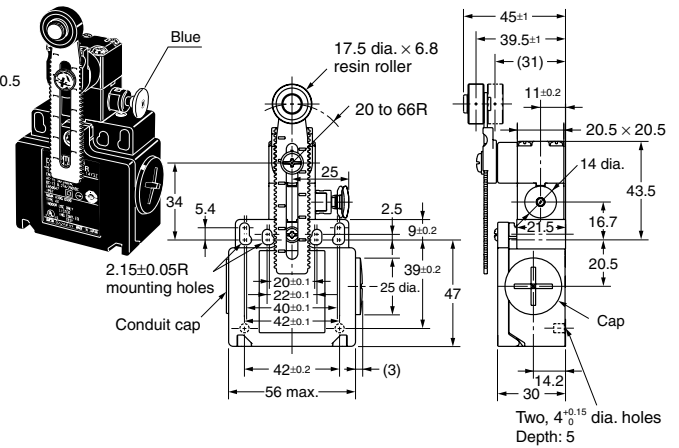
Roller Lever (Resin Lever, Resin Roller)

D4N-5□20R D4N-6□20R
D4N-7□20R D4N-8□20R



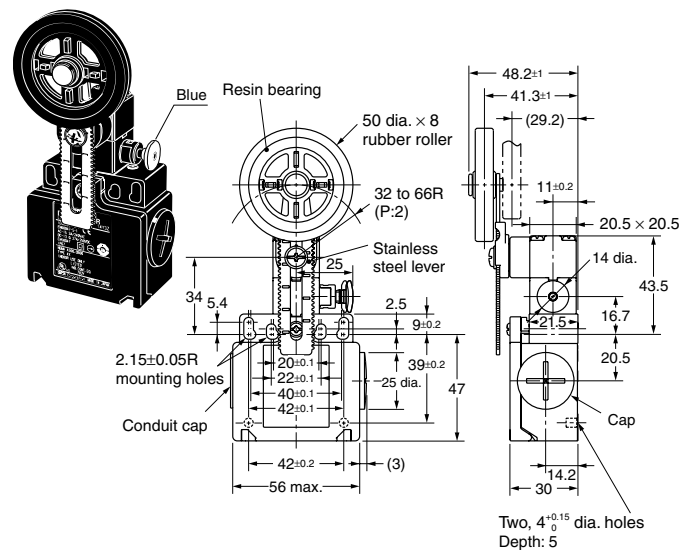
Adjustable Roller Lever, Form Lock (with Metal Lever, Resin Roller)

D4N-5□2GR D4N-6□2GR
D4N-7□2GR D4N-8□2GR



Adjustable Roller Lever, Form Lock (with Metal Lever, Rubber Roller)

D4N-5□2HR D4N-6□2HR
D4N-7□2HR D4N-8□2HR



Dimensions (continued)

(mm)

Switches

2-conduit Models

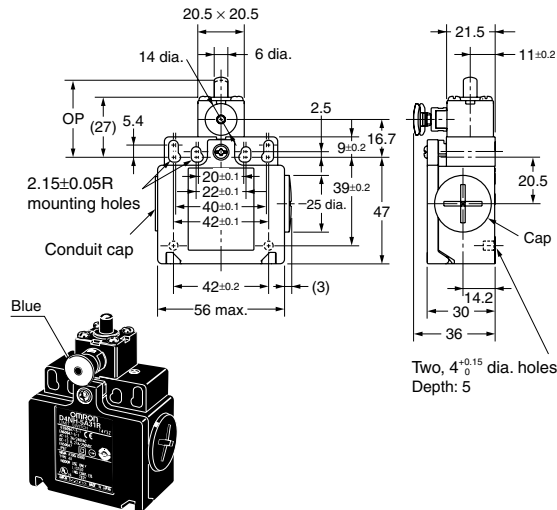
Plunger

D4N-5□31R

D4N-6□31R

D4N-731R

D4N-8□31R



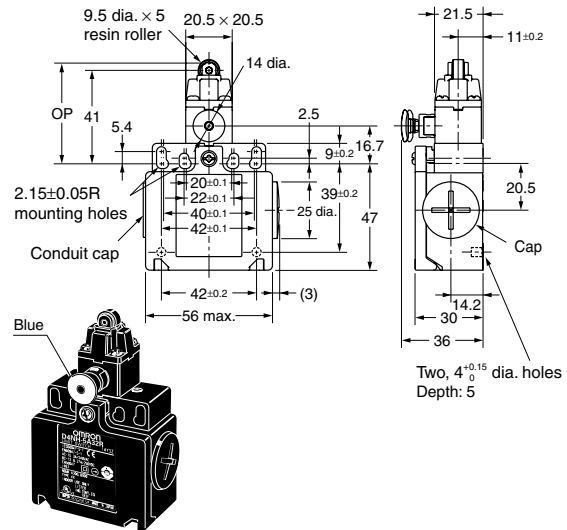
Roller Plunger

D4N-5□32R

D4N-6□32R

D4N-7□32R

D4N-8□32R



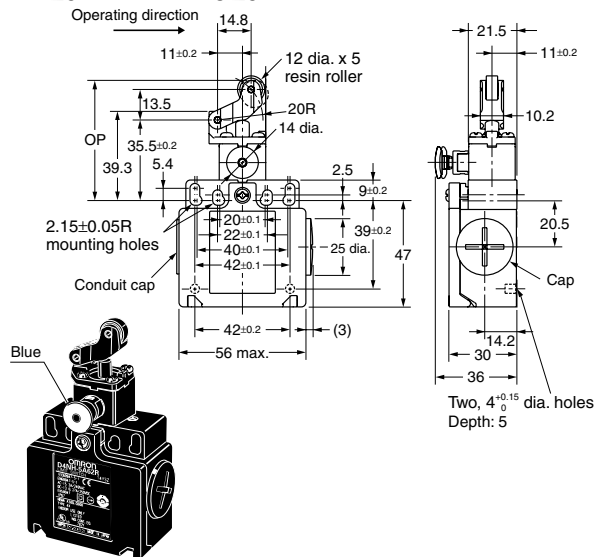
One-way Roller Arm Lever (Horizontal)

D4N-5□62R

D4N-6□62R

D4N-7□62R

D4N-8□62R



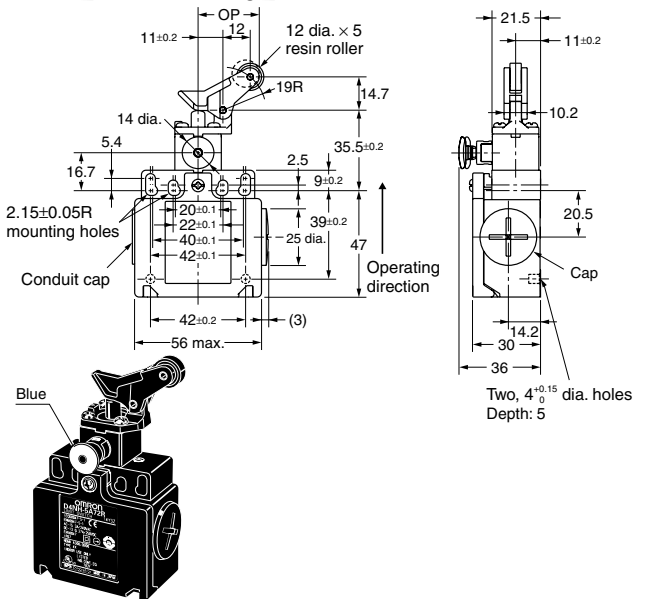
One-way Roller Arm Lever (Vertical)

D4N-5□72R

D4N-6□72R

D4N-7□72R

D4N-8□72R



Ordering

Model Number Structure

D4N – □ □ □ N

1 2 3

- | | |
|---|--|
| <p>1 Conduit size</p> <ul style="list-style-type: none"> 1: Pg13.5 (1-conduit) 2: G1/2 (1-conduit) 3: NPT 4: M20 (1-conduit) 6: G1/2 (2-conduit) 8: M20 (2-conduit) 9: M12 connector (1-conduit) <p>2 Built-in Switch</p> <ul style="list-style-type: none"> A: 1NC/1NO (slow-action) B: 2NC (slow-action) C: 2NC/1NO (slow-action) D: 3NC (slow-action) | <p>3 Head and Actuator</p> <ul style="list-style-type: none"> 20: Roller lever (resin lever, resin roller) 2G: Adjustable roller lever, form lock (metal lever, resin roller) 2H: Adjustable roller lever, form lock (metal lever, rubber roller) 31: Top Plunger 32: Top Roller Plunger 62: One-way roller arm lever (horizontal) 72: One-way roller arm lever (vertical) |
|---|--|

Ordering (continued)

List of Models

Safety Limit Switches (with Direct Opening Mechanism)

Actuator	Conduit size		Built-in switch mechanism							
			1NC/1NO (Slow-action)		2NC (Slow-action)		2NC/1NO (Slow-action)		3NC (Slow-action)	
			Model	Direct opening	Model	Direct opening	Model	Direct opening	Model	Direct opening
Roller lever (resin lever, resin roller) 	1-conduit	NPT	D4N-4A20R-NPT		D4N-4B20R-NPT		D4N-4C20R-NPT		D4N-4D20R-NPT	
		M20	D4N-4A20R		D4N-4B20R		D4N-4C20R		D4N-4D20R	
		M12 connector	D4N-9A20R		D4N-9B20R		---		---	
	2-conduit	M20	D4N-8A20R		D4N-8B20R		D4N-8C20R		D4N-8D20R	
Adjustable roller lever, form lock (metal lever, resin roller) 	1-conduit	NPT	D4N-4A2GR-NPT		D4N-4B2GR-NPT		D4N-4C2GR-NPT		D4N-4D2GR-NPT	
		M20	D4N-4A2GR		D4N-4B2GR		D4N-4C2GR		D4N-4D2GR	
		M12 connector	D4N-9A2GR		D4N-9B2GR		---		---	
	2-conduit	M20	D4N-8A2GR		D4N-8B2GR		D4N-8C2GR		D4N-8D2GR	
Adjustable roller lever, form lock (metal lever, rubber roller) 	1-conduit	NPT	D4N-4A2HR-NPT		D4N-4B2HR-NPT		D4N-4C2HR-NPT		D4N-4D2HR-NPT	
		M20	D4N-4A2HR		D4N-4B2HR		D4N-4C2HR		D4N-4D2HR	
		M12 connector	D4N-9A2HR		D4N-9B2HR		---		---	
	2-conduit	M20	D4N-8A2HR		D4N-8B2HR		D4N-8C2HR		D4N-8D2HR	
Plunger 	1-conduit	NPT	D4N-4A31R-NPT		D4N-4B31R-NPT		D4N-4C31R-NPT		D4N-4D31R-NPT	
		M20	D4N-4A31R		D4N-4B31R		D4N-4C31R		D4N-4D31R	
		M12 connector	D4N-9A31R		D4N-9B31R		---		---	
	2-conduit	M20	D4N-8A31R		D4N-8B31R		D4N-8C31R		D4N-8D31R	
Roller plunger 	1-conduit	NPT	D4N-4A32R-NPT		D4N-4B32R-NPT		D4N-4C32R-NPT		D4N-4D32R-NPT	
		M20	D4N-4A32R		D4N-4B32R		D4N-4C32R		D4N-4D32R	
		M12 connector	D4N-9A32R		D4N-9B32R		---		---	
	2-conduit	M20	D4N-8A32R		D4N-8B32R		D4N-8C32R		D4N-8D32R	
One-way roller arm lever (horizontal) 	1-conduit	NPT	D4N-4A62R-NPT		D4N-4B62R-NPT		D4N-4C62R-NPT		D4N-4D62R-NPT	
		M20	D4N-4A62R		D4N-4B62R		D4N-4C62R		D4N-4D62R	
		M12 connector	D4N-9A62R		D4N-9B62R		---		---	
	2-conduit	M20	D4N-8A62R		D4N-8B62R		D4N-8C62R		D4N-8D62R	
One-way roller arm lever (vertical) 	1-conduit	NPTT	D4N-4A72R-NPT		D4N-4B72R-NPT		D4N-4C72R-NPT		D4N-4D72R-NPT	
		M20	D4N-4A72R		D4N-4B72R		D4N-4C72R		D4N-4D72R	
		M12 connector	D4N-9A72R		D4N-9B72R		---		---	
	2-conduit	M20	D4N-8A72R		D4N-8B72R		D4N-8C72R		D4N-8D72R	

Note: It's recommended that M20 be used for Switches to be exported to Europe and NPT be used for Switches to be exported to North American countries.