



NON-METALLIC CORRUGATED FLEXIBLE CONDUIT / NON-METALLIC FLEXIBLE CONDUIT

SANFLEKI ROBO

サンフレキROBO



サンフレキROBO

1. Non-metallic corrugated flexible conduit

- Type NS, NP, NF
- Comply with JIS C 8461
- Oil-resistant
- Suitable for machine tools
- Earth bonding is not required

2. Non-metallic corrugated flexible conduit - Braded shield

- Type NSBS
- Solution for EMC

3. Non-metallic corrugated flexible conduit - Track type

- Type NDF
- Possible movement: Similar to movement of POWER GODZILLA (cable carriers)

CONTENTS / SANFLEKI ROBO

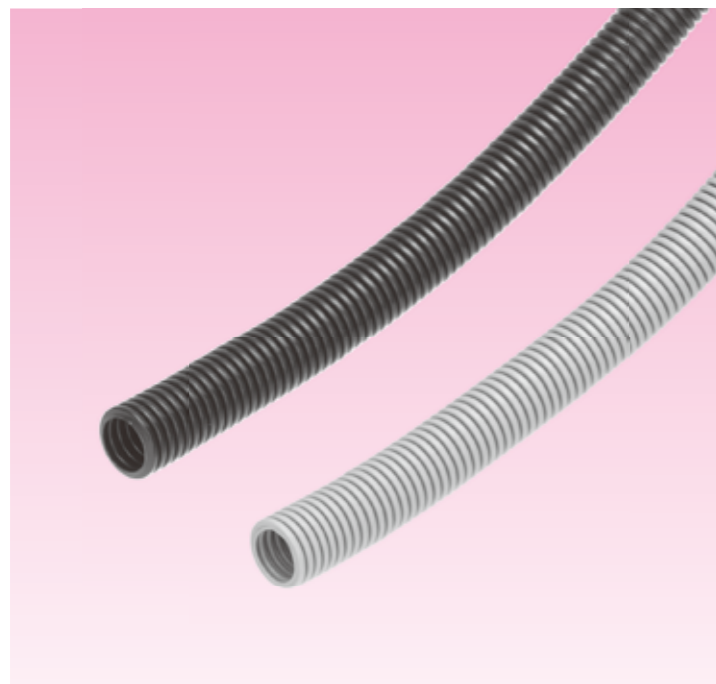
Typical applications	Type	Feature	Material / Color	Temperature range/ Flammability	Page	
• Machinery	Type NS RUL	• Compressive strength • Moderate Flexibility	• Refer to each page	Continuous flexing cycles	-5°C ~ 65°C	81
				Fixed installation	-40°C ~ 115°C	
				Flammability	94V2	
• Inside cable carriers	Type NP RUL	• Moderate Flexibility • Smaller bending radius	• Refer to each page	Continuous flexing cycles	-10°C ~ 65°C	82
				Fixed installation	-40°C ~ 115°C	
				Flammability	94V2	
• Robots • Inside cable carriers • Flexibility Requirement	Type NF RUL	• Flexibility • Cold-resistant	• Refer to each page	Continuous flexing cycles	-10°C ~ 65°C	83
				Fixed installation	-40°C ~ 115°C	
				Flammability	94HB	
• Welding place • Electrical noise solution	Type NSBS	• Braded shield • Moderate Flexibility	• Refer to each page	Continuous flexing cycles	-5°C ~ 65°C	85
				Fixed installation	-40°C ~ 115°C	
				Flammability	94V2	
• Track type • Flexibility Requirement	Type NDF	• Flexibility • Possible movement: Similar to movement of cable carriers	• Refer to each page	Continuous flexing cycles	-10°C ~ 65°C	86
				Fixed installation	-40°C ~ 115°C	
				Flammability	94HB	
• Smaller outside dia. requirement	Type NP/NQ	• Smaller outside dia. • Moderate Flexibility	• Refer to each page	Continuous flexing cycles	NP : -10°C ~ 65°C NQ : -5°C ~ 65°C	88
				Fixed installation	NP : -40°C ~ 115°C NQ : -30°C ~ 100°C	
				Flammability	94V2	
• Slit type • Wiring harnesses • 3D movement system	Type N2S/N2P/N2F/N2Q/ND2F	• Slit type	• Refer to each page	Fixed installation	N2S : -40°C ~ 115°C	81 82,88 83 88 86
					N2P : -40°C ~ 115°C	
					N2F : -40°C ~ 115°C	
					N2Q : -30°C ~ 100°C	
					ND2F : -40°C ~ 115°C	
• Reinforced construction requirement	Type NT	• Reinforced construction • Moderate Flexibility	• Refer to each page	Continuous flexing cycles	-5°C ~ 60°C	89
				Fixed installation	-25°C ~ 60°C	
				Flammability	94V2	
• Antistatic conduit requirement	Type NM	• Antistatic • Moderate Flexibility	• Refer to each page	Continuous flexing cycles	-10°C ~ 60°C	86
				Fixed installation	-40°C ~ 90°C	
				Flammability	94HB	
• Railroad car use	Type NRS/NRF	• Weather-resistant • Moderate Flexibility	• Refer to each page	Fixed installation	NRS : -40°C ~ 105°C NRF : -50°C ~ 95°C	84
				Flammability	Flame retardant tested by JRMA	

SANFLEKI ROBO

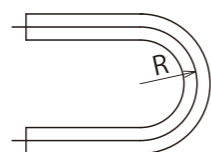
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QUALITY STANDARD	QUALITY STANDARD	MATERIAL	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
	JIS C8461-23	PA6	IP67	High Oil resistance	RoHS	HALOGEN FREE	UL94V2	Lowest -5°C ~ Highest 65°C	Lowest -40°C ~ Highest 115°C

Type NS



- Non-metallic corrugated flexible conduit
- Suitable for indoor installation
- Higher compressive strength
- Mechanical properties (JIS C8461):
NS12, NS12LG : Very light class
The others : Light class
- Munsell color system: N7
- Earth bonding is not required
- Note: Not suitable for twist flexing cycle
- Note: Rotary-style fitting shall be used in the environment where twist flexing is required
- Note: Tensile Strength is lower than metallic flexible conduit
- Cables shall be inserted
- Connectable fitting: N2 SERIES FITTING (e.g. Type N2BG)
- Available on request: Fittings for European size
- Smaller outside dia. SANFLEKI ROBO is also available, which is mainly used for automobiles. Refer to the page for Smaller outside dia. SANFLEKI ROBO for more information.



METRIC SIZE [BLACK / LIGHT GRAY]

Delivery	Item number		Outside dia.	Inside dia.	Min Bend Radius R		Connectable thread			Weight (kg)		M per coil	
	Black	Light gray			For fixed installation	For flexing cycle	G Thread	Metric Thread	Pg Thread	Per M	Per coil		
○	○	NS 12	NS 12 LG	12.0	8.2	30	55	—	M16/M20	Pg9	0.023	1.15	50
○	○	NS 16	NS 16 LG	16.0	11.5	40	75	—	M16/M20	Pg11	0.04	2.0	50
○	○	NS 20	NS 20 LG	20.0	15.3	45	90	G1/2(G16)	M20	Pg16/Pg13.5	0.06	3.0	50
○	○	NS 25	NS 25 LG	25.0	19.6	50	100	G3/4(G22)	M25	Pg21	0.09	4.5	50
○	○	NS 32	NS 32 LG	32.0	26.0	85	165	G1(G28)	M32	Pg29	0.11	5.5	50
○	○	NS 40	NS 40 LG	40.0	33.5	105	210	G1-1/4(G36)	M40	Pg36	0.16	4.8	30
○	○	NS 50	NS 50 LG	50.0	42.8	130	260	G1-1/2(G42)	M50	Pg42	0.21	6.3	30
○	○	NS 63	NS 63 LG	63.0	55.6	170	340	G2(G54)	M63	Pg48	0.26	5.2	20

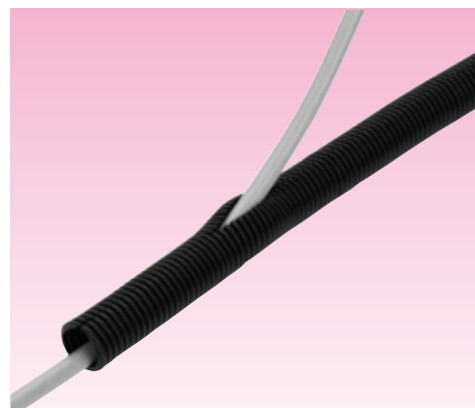
EUROPEAN SIZE [BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R		Connectable thread			Weight (kg)		M per coil
				For fixed installation	For flexing cycle	G Thread	Metric Thread	Pg Thread	Per M	Per coil	
○	NS 16	16.0	11.5	40	75	—	M16/M20	Pg11	0.04	2.0	50
○	NS 21	21.2	16.5	50	100	G1/2(G16)	M20	Pg16/Pg13.5	0.06	3.0	50
○	NS 28	28.5	23.0	60	120	G3/4(G22)	M25	Pg21	0.10	5.0	50
○	NS 34	34.5	29.0	90	180	G1(G28)	M32	Pg29	0.14	7.0	50
○	NS 42	42.5	36.0	110	220	G1-1/4(G36)	M40	Pg36	0.18	5.4	30
○	NS 54	54.5	48.0	140	280	G1-1/2(G42)	M50	Pg42	0.23	6.9	30

NS16 in METRIC SIZE and NS16 in EUROPEAN SIZE are the same type

TEMPERATURE RANGE FOR FIXED INSTALLATION
Lowest -40°C ~ Highest 115°C

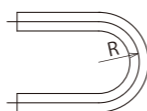
Type N2S (SLIT TYPE)



- Non-metallic corrugated flexible conduit
- SANFLEKI ROBO NS Slit type
- Cable insertion tool :Look at a page for Cable insertion tool

METRIC SIZE [BLACK / LIGHT GRAY]

Delivery	Item number		Outside dia.	Inside dia.	Min Bend Radius R	Weight (kg)		M per coil	
	Black	Light gray				For fixed installation	Per M		Per coil
③	⑤	N2S 12	N2S 12 LG	12.0	8.2	40	0.023	1.15	50
③	⑤	N2S 16	N2S 16 LG	16.0	11.5	45	0.04	2.0	50
③	⑤	N2S 20	N2S 20 LG	20.0	15.3	50	0.06	3.0	50
○	⑤	N2S 25	N2S 25 LG	25.0	19.6	60	0.09	4.5	50
○	⑤	N2S 32	N2S 32 LG	32.0	26.0	90	0.11	5.5	50
○	⑤	N2S 40	N2S 40 LG	40.0	33.5	110	0.16	4.8	30
○	⑤	N2S 50	N2S 50 LG	50.0	42.8	160	0.21	6.3	30
○	⑤	N2S 63	N2S 63 LG	63.0	55.6	180	0.26	5.2	20



SANFLEKI ROBO

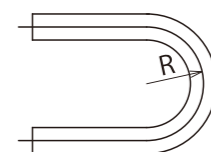
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QUALITY STANDARD	QUALITY STANDARD	MATERIAL	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
	JIS C8461-23	PA6	IP67	High Oil resistance	RoHS	HALOGEN FREE	UL94V2	Lowest -5°C ~ Highest 65°C	Lowest -40°C ~ Highest 115°C

Type NP



- Non-metallic corrugated flexible conduit
- Suitable for indoor installation
- High flexibility
- Designed for continuous flexing cycles
- Smaller bending radius
- Used inside cable carriers
- Marked with a white dotted line
- Mechanical properties (JIS C8461): Very light class
- Earth bonding is not required
- Note: Not suitable for twist flexing cycle
- Note: Rotary-style fitting shall be used in the environment where twist flexing is required
- Note: Tensile Strength is lower than metallic flexible conduit
- Cables shall be inserted
- Connectable fitting: N2 SERIES FITTING (e.g. Type N2BG)
- Smaller outside dia. SANFLEKI ROBO is also available, which is mainly used for automobiles. Refer to the page for Smaller outside dia. SANFLEKI ROBO for more information.

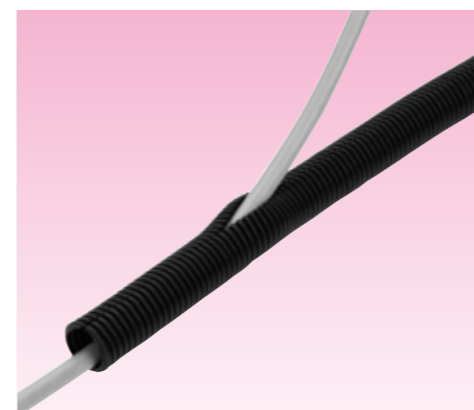


METRIC SIZE [BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R			Connectable thread			Weight (kg)		M per coil
				For fixed installation	For flexing cycle	Inside cable carrier	G Thread	Metric Thread	Pg Thread	Per M	Per coil	
○	NP 12	12.0	8.2	25	50	50	—	M16/M20	Pg9	0.023	1.15	50
○	NP 16	16.0	11.5	35	70	70	—	M16/M20	Pg11	0.04	2.0	50
○	NP 20	20.0	15.3	40	80	90	G1/2(G16)	M20	Pg16/Pg13.5	0.06	3.0	50
○	NP 25	25.0	19.6	45	90	100	G3/4(G22)	M25	Pg21	0.09	4.5	50
○	NP 32	32.0	26.0	75	140	150	G1(G28)	M32	Pg29	0.11	5.5	50
○	NP 40	40.0	33.5	90	190	210	G1-1/4(G36)	M40	Pg36	0.16	4.8	30
○	NP 50	50.0	43.3	110	230	250	G1-1/2(G42)	M50	Pg42	0.21	6.3	30
○	NP 63	63.0	56.2	150	300	330	G2(G54)	M63	Pg48	0.26	5.2	20

TEMPERATURE RANGE FOR FIXED INSTALLATION
Lowest -40°C ~ Highest 115°C

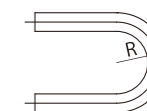
Type N2P (SLIT TYPE)



- Non-metallic corrugated flexible conduit
- SANFLEKI ROBO NP Slit type
- Cable insertion tool :Look at a page for Cable insertion tool

METRIC SIZE [BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R	Weight (kg)		M per coil
					For fixed installation	Per M	
③	N2P 12	12.0	8.2	30	0.023	1.15	50
③	N2P 16	16.0	11.5	35	0.04	2.0	50
③	N2P 20	20.0	15.3	40	0.06	3.0	50
③	N2P 25	25.0	19.6	50	0.09	4.5	50
③	N2P 32	32.0	26.0	80	0.11	5.5	50
③	N2P 40	40.0	33.5	100	0.16	4.8	30
③	N2P 50	50.0	43.3	150	0.21	6.3	30
③	N2P 63	63.0	56.2	160	0.26	5.2	20



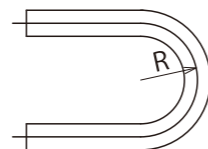
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QUALITY STANDARD	QUALITY STANDARD	MATERIAL	FEATURE	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
UL	JIS C8461-23	PA11	IP67	Cold resistance	High Oil resistance	Holds up to enormously repeated flexing	RoHS	HALOGEN FREE	UL94HB	Lowest -5°C ~ Highest 65°C	Lowest -40°C ~ Highest 115°C

Type NF



- Non-metallic corrugated flexible conduit
- Suitable for indoor installation
- Hold up to repeated flexing
- Cold-resistant
- Designed for continuous flexing cycles
- Marked with a yellow dotted line
- Mechanical properties (JIS C8461): Very light class
- Earth bonding is not required
- Note: Not suitable for twist flexing cycle
- Note: Rotary-style fitting shall be used in the environment where twist flexing is required
- Note: Tensile Strength is lower than metallic flexible conduit
- Cables shall be inserted
- Connectable fitting: N2 SERIES FITTING (e.g. Type N2BG)

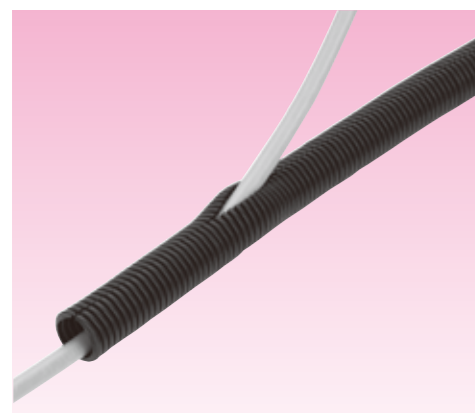


METRIC SIZE [BLACK]

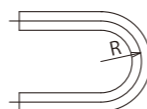
Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R			Connectable thread			Weight (kg)		M per coil
				For fixed installation	For flexing cycle	Inside cable carrier	G Thread	Metric Thread	Pg Thread	Per M	Per coil	
○	NF 12	12.0	8.2	30	50	50	—	M16/M20	Pg9	0.023	1.15	50
○	NF 16	16.0	11.5	40	70	70	—	M16/M20	Pg11	0.04	2.0	50
○	NF 20	20.0	15.3	45	80	90	G1/2(G16)	M20	Pg16/Pg13.5	0.06	3.0	50
○	NF 25	25.0	19.6	50	90	100	G3/4(G22)	M25	Pg21	0.09	4.5	50
○	NF 32	32.0	26.0	85	140	150	G1(G28)	M32	Pg29	0.12	6.0	50
○	NF 40	40.0	33.5	100	190	210	G1-1/4(G36)	M40	Pg36	0.17	5.1	30
○	NF 50	50.0	43.3	120	230	250	G1-1/2(G42)	M50	Pg42	0.22	6.6	30
○	NF 63	63.0	56.2	160	300	330	G2(G54)	M63	Pg48	0.28	5.6	20

TEMPERATURE RANGE FOR FIXED INSTALLATION
Lowest -40°C ~ Highest 115°C

Type N2P (SLIT TYPE)



- Non-metallic corrugated flexible conduit
- SANFLEKI ROBO NF Slit type
- Cable insertion tool :Look at a page for Cable insertion tool



METRIC SIZE [BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R For fixed installation	Weight (kg)		M per coil
					Per M	Per coil	
③	N2F 12	12.0	8.2	40	0.023	1.15	50
③	N2F 16	16.0	11.5	45	0.04	2.0	50
③	N2F 20	20.0	15.3	50	0.06	3.0	50
③	N2F 25	25.0	19.6	60	0.09	4.5	50
③	N2F 32	32.0	26.0	90	0.12	6.0	50
③	N2F 40	40.0	33.5	110	0.17	5.1	30
③	N2F 50	50.0	43.3	160	0.22	6.6	30
③	N2F 63	63.0	56.2	180	0.28	5.6	20

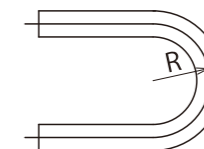
SANFLEKI ROBO

MAIN MATERIAL	MATERIAL	FEATURE	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
PA6	PA12	Limited water resistance	Lowest -40°C ~ Highest 105°C (NRS)	Lowest -40°C ~ Highest 115°C (NRF)

Type NRS/NRF



- Non-metallic corrugated flexible conduit
- Corresponds to European railway standard
- Available with 2 types:
Type NRS: Designed for inside rolling stock
Type NRF: Designed for outside rolling stock, Weather-resistant, Cold-resistant
- Flame retardant (tested by JRMA-Japan Railway Rollingstock & Machinery Association)
- Should fittings for NRS or NRF be required, contact us for information



EUROPEAN SIZE [BLACK]

Delivery	Item number		Outside dia.	Inside dia.	Min Bend Radius R For fixed installation	Connectable thread			Weight (kg)		M per coil
	Inside rolling stock	Outside rolling stock				G Thread	Metric Thread	Pg Thread	Per M	Per coil	
確	NRS 16	NRF 16	16.0	11.5	40	—	M16/M20	Pg11	0.04	2.0	50
確	NRS 21	NRF 21	21.2	16.5	50	G1/2(G16)	M20	Pg16/Pg13.5	0.06	3.0	50
確	NRS 28	NRF 28	28.5	23.0	60	G3/4(G22)	M25	Pg21	0.10	5.0	50
確	NRS 34	NRF 34	34.5	29.0	90	G1(G28)	M32	Pg29	0.14	7.0	50
確	NRS 42	NRF 42	42.5	36.0	110	G1-1/4(G36)	M40	Pg36	0.18	5.4	30
確	NRS 54	NRF 54	54.5	48.0	140	G1-1/2(G42)	M50	Pg42	0.23	6.9	30

CERTIFICATE OF TEST RESULT

鉄道車両用材料燃焼試験成績書

試験番号 車材燃試 22-840K
依頼者名 株式会社三井製作所
製造者名 株式会社三井製作所
品名 合成樹脂製フッ素電線管
商品名 かわらROBO Type NRS
材料 5'1711' 6 (PA-6)
厚さ 0.8mm
難燃処理法
試験年月日 平成 23年 1月 25日

試験成績
温度 16℃ 湿度 62% アルコール燃焼時間 1分 33秒

アルコール燃焼中		アルコール燃焼後	
着火	あり 22秒	残炎	なし
着炎	あり 22秒	残じん	なし
煙	普通	炭化	縁に達しない 90mm
火勢	上層を超えない	変形	局部的貫通孔 70mm

備考

判定 難燃性

耐溶融滴下性試験
判定 平穏性

社団法人 日本鉄道車両機械技術協会

鉄道車両用材料燃焼試験成績書

試験番号 車材燃試 22-841K
依頼者名 株式会社三井製作所
製造者名 株式会社三井製作所
品名 合成樹脂製フッ素電線管
商品名 かわらROBO Type NRF
材料 5'1711' 12 (PA-12)
厚さ 0.8mm
難燃処理法
試験年月日 平成 23年 1月 25日

試験成績
温度 16℃ 湿度 62% アルコール燃焼時間 1分 43秒

アルコール燃焼中		アルコール燃焼後	
着火	あり 23秒	残炎	なし
着炎	あり 23秒	残じん	なし
煙	普通	炭化	縁に達しない 60mm
火勢	上層を超えない	変形	局部的貫通孔 50mm

備考

判定 難燃性

耐溶融滴下性試験
判定 平穏性

社団法人 日本鉄道車両機械技術協会

SANFLEKI ROBO

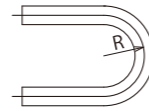
Type NSBS



FEATURE	FEATURE	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
IP67	EMI	Spatter resistance	RoHS	UL94V2	Lowest -5°C ~ Highest 65°C	Lowest -40°C ~ Highest 115°C

SANFLEKI ROBO NS + Metallic Braided shield

- Non-metallic corrugated flexible conduit
- Metallic Braided shield
- Suitable for environments where welding takes place
- Solution for Tensile Strength and Electrical noise
- Water-resistant of a connection between NSBS and fitting for NSBS
- Note: Not suitable for high speed moving cable carriers. There may emerge abrasion on the surface of cable carriers
- Connectable fitting: NB SERIES FITTING (e.g. Type NBBG25)



QUALITY STANDARD
JIS C8461-23

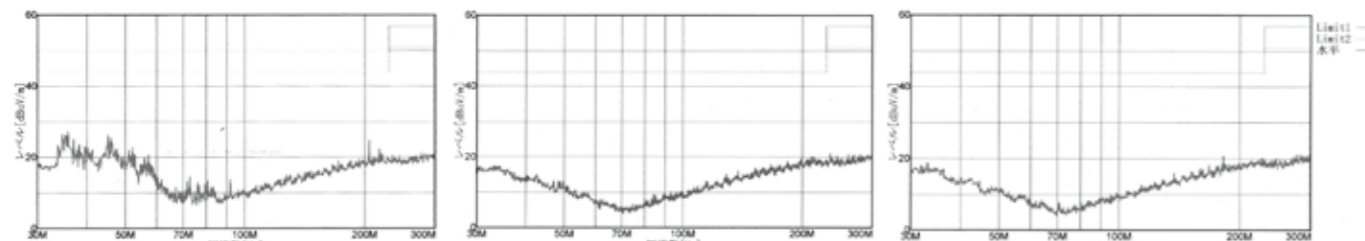
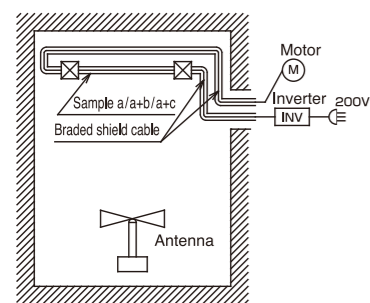
[METRIC SIZE]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R		Connectable thread				Weight (kg)		M per coil
				For fixed installation	For flexing cycle	G Thread	Metric Thread	Pg Thread	CTC Thread	Per M	Per coil	
○	NSBS 12	13.6	8.2	30	60	—	M16/M20	Pg9	—	0.16	8.0	50
○	NSBS 16	17.6	11.5	40	80	—	M16/M20	Pg11	—	0.21	10.5	50
○	NSBS 20	21.6	15.3	45	95	G1/2(G16)	M20	Pg16/Pg13.5	CTC19	0.27	13.5	50
○	NSBS 25	26.6	19.6	60	125	G3/4(G22)	M25	Pg21	CTC25	0.35	17.5	50
○	NSBS 32	33.6	26.0	95	180	G1(G28)	M32	Pg29	CTC31	0.46	23.0	50
○	NSBS 40	41.6	33.5	130	230	G1-1/4(G36)	M40	Pg36	CTC39	0.58	17.4	30
○	NSBS 50	51.6	42.8	160	300	G1-1/2(G42)	M50	Pg42	CTC51	0.72	21.6	30
○	NSBS 63	64.6	55.6	200	360	G2(G54)	M63	Pg48	CTC63	0.85	17.0	20

EUROPEAN SIZE [BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R		Connectable thread				Weight (kg)		M per coil
				For fixed installation	For flexing cycle	G Thread	Metric Thread	Pg Thread	CTC Thread	Per M	Per coil	
○	NSBS 16	17.6	11.5	40	80	—	M16/M20	Pg11	—	0.21	10.5	50
☒	NSBS 21	22.8	16.5	60	110	G1/2(G16)	M20	Pg16/Pg13.5	CTC19	0.29	14.5	50
☒	NSBS 28	30.1	23.0	80	150	G3/4(G22)	M25	Pg21	CTC25	0.40	20.0	50
☒	NSBS 34	36.1	29.0	110	200	G1(G28)	M32	Pg29	CTC31	0.50	25.0	50
☒	NSBS 42	44.1	36.0	140	250	G1-1/4(G36)	M40	Pg36	CTC39	0.62	18.6	50
☒	NSBS 54	56.1	47.0	180	330	G1-1/2(G42)	M50	Pg42	CTC51	0.78	23.4	30

ELECTRICAL NOISE SHIELDING EFFECT TEST



a <CABLE>

Condition: No conduit is used
Electrical noise generated : 30MHz ~ 100MHz

a <CABLE> + b <RIGID STEEL CONDUIT>

Condition: A cable goes through a rigid steel conduit

a <CABLE> + c <SANFLEKI ROBO Type NSBS>

Condition: A cable goes through SANFLEKI ROBO Type NSBS
Shield effect: the line chart shows that SANFLEKI ROBO Type NSBS has almost the same shield effect as a rigid steel conduit does

Contact us for information of product availability and delivery

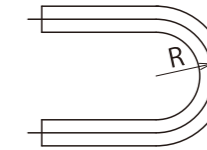
SANFLEKI ROBO

Type NM



MATERIAL	FEATURE	FEATURE	FEATURE	FEATURE	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
PA12	Antistatic	IP67	High Oil resistance	Holds up to enormously repeated flexing	UL94HB	Lowest -10°C ~ Highest 60°C	Lowest -40°C ~ Highest 90°C

- Non-metallic corrugated flexible conduit
- Suitable for indoor installation
- Hold up to repeated flexing
- Antistatic
- Designed for continuous flexing cycles in clean rooms
- Note: Not suitable for twist flexing cycle
- Note: Rotary-style fitting shall be used in the environment where twist flexing is required
- Cables shall be inserted
- Available on request: Antistatic fitting (Under development)

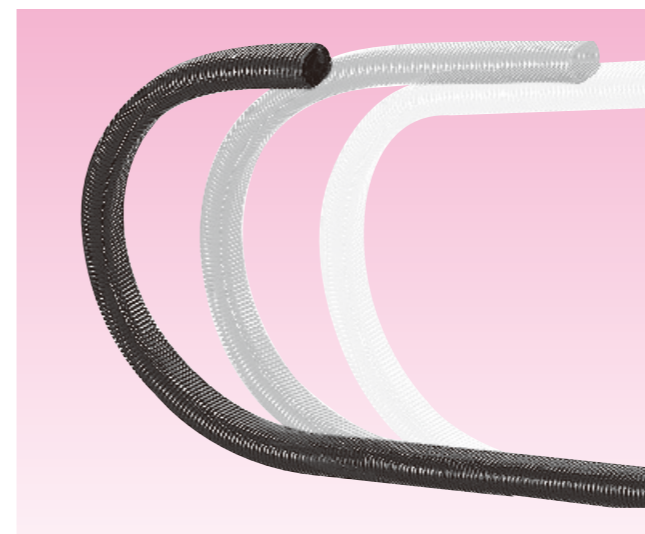


METRIC SIZE [BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R			Connectable thread				Weight (kg)		M per coil
				For fixed installation	For flexing cycle	Inside cable carrier	G Thread	Metric Thread	Pg Thread	Per M	Per coil		
☒	NM 12	12.0	8.2	30	50	50	—	M16/M20	Pg9	0.023	1.15	50	
☒	NM 16	16.0	11.5	40	70	70	—	M16/M20	Pg11	0.04	2.0	50	
☒	NM 20	20.0	15.3	45	80	90	G1/2(G16)	M20	Pg16/Pg13.5	0.06	3.0	50	
☒	NM 25	25.0	19.6	50	90	100	G3/4(G22)	M25	Pg21	0.09	4.5	50	
☒	NM 32	32.0	26.0	85	140	150	G1(G28)	M32	Pg29	0.12	6.0	50	
☒	NM 40	40.0	33.5	100	190	210	G1-1/4(G36)	M40	Pg36	0.17	5.1	30	
☒	NM 50	50.0	42.8	120	230	250	G1-1/2(G42)	M50	Pg42	0.22	6.6	30	
☒	NM 63	63.0	55.6	160	300	330	G2(G54)	M63	Pg48	0.28	5.6	20	

SANFLEKI ROBO

Type NDF

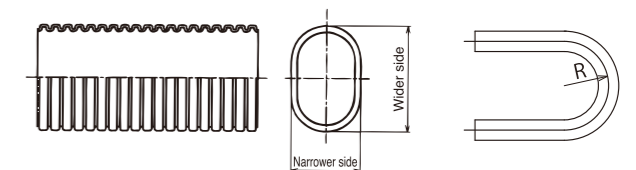


Non-metallic corrugated flexible conduit - Track type

- Possible movement: Similar to movement of cable carriers
- MOQ: Contact us for information
- Connectable fitting: ND SERIES FITTING (e.g. Type NDBG24)

ND Slit type: ND2F24

- Non-water-resistant
- Connectable fitting for ND2F24: Unavailable
- Use Non-metallic saddle NDRS24 to fix (Refer to the page of ND SERIES FITTING)



[BLACK]

Note 1 : Contact us for information about length available and MOQ.

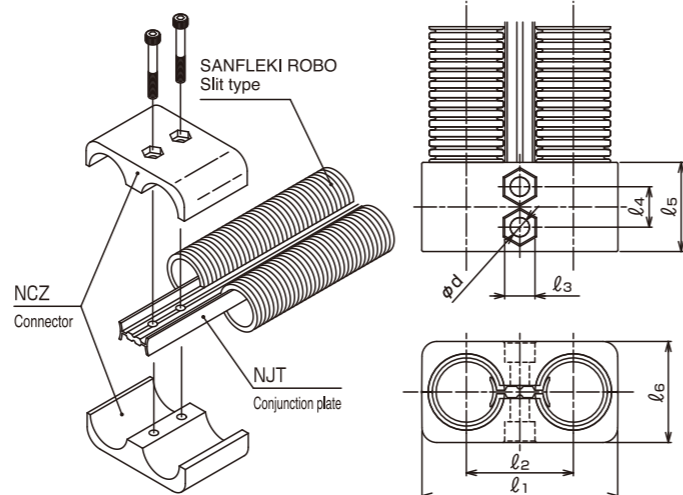
Delivery	Item number	Outside dia.		Inside dia.		Min Bend Radius R		Connectable thread				Weight (kg)	Length (mm)
		Narrower side	Wider side	Narrower side	Wider side	For fixed installation	For flexing cycle	G Thread	Metric Thread	Pg Thread	CTC Thread		
③	NDF 24	24.0	36.5	17.8	30.3	80	140	G1(G28)	M32	Pg29	CTC31	0.12	Refer to NOTE 1 above
③	NDF 27	27.0	47.5	20.7	41.2	100	190	G1-1/4(G36)	M40	Pg36	CTC39	0.17	Refer to NOTE 1 above
③	NDF 34	34.0	59.0	27.2	52.2	120	230	G1-1/2(G42)	M50	Pg42	CTC51	0.19	Refer to NOTE 1 above
③	NDF 45	45.0	63.0	37.7	55.7	130	250	—	—	—	—	0.20	Refer to NOTE 1 above
⑦	ND2F24	There is a slit on the wider side. The size is the same as NDF24.										Refer to NOTE 1 above	

Contact us for information of product availability and delivery

SANFLEKI ROBO

MAIN MATERIAL	MAIN MATERIAL	COLOR	FEATURE	FEATURE
HD-PE (NJT)	PA66 (NCZ)	Black	Non-water resistance	Oil resistance

SANFLEKI ROBO 3D movement system

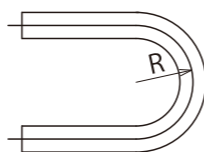


Non-metallic corrugated flexible conduit slit type - 3D movement system

- 3D movement system - assembly parts
- A pair of SANFLEKI ROBO Slit type can be connected by NJT(conjunction plate) and NCZ (connector)
- Connectable SANFLEKI ROBO: Refer to the chart
- Possible movement: Similar to movement of cable carriers on a short track
- Less rasping and grating sound
- Solution to reduce friction
- NJT does not have bolt holes. Please make bolt holes in the appropriate positions on NJT in order to connect NCZ to it.

Conjunction plate

Delivery	Item number	Connectable SANFLEKI ROBO	M per piece
3	NJT 16	N2S 16	Required length
3	NJT 20/25	N2P 20,25	
3	NJT 32	N2F 32	



Connector (bolts / nuts are unavailable)

Delivery	Item number	Connectable SANFLEKI ROBO	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	φ d	Suitable nominated size of bolt	
○	NCZ 16	N2S	16	44.0	23	7	12.5	25.0	23	4.3	M4
○	NCZ 20		20	55.0	30	10	14.0	30.0	29	6.4	M6
○	NCZ 25	N2F	25	66.0	36	10	14.0	30.0	34	6.4	M6
○	NCZ 32		32	80.0	43	10	14.0	30.0	42	6.4	M6

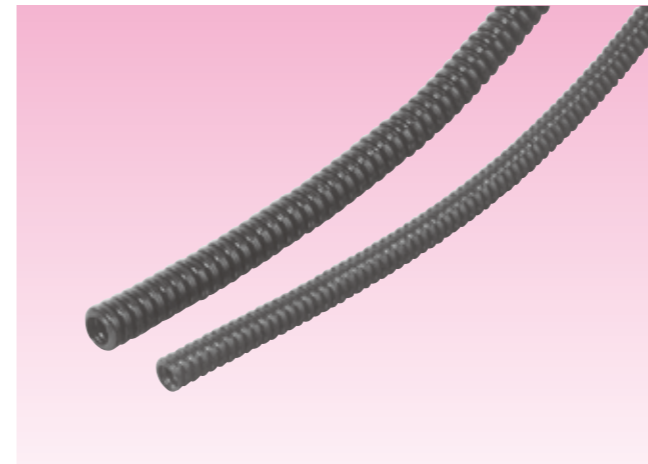
Min. bending radius

Nominal size	Min Bend Radius R
#16	80
#20	120
#25	180
#32	300

SANFLEKI ROBO

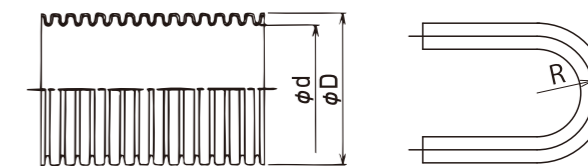
MATERIAL	MATERIAL	COLOR	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
PA6 (NP)	PP (NQ)	Black	IP67	RoHS (NP)	UL94V2	(NP) Lowest -10℃ ~ Highest 65℃ (NQ) Lowest -5℃ ~ Highest 65℃	(NP) Lowest -40℃ ~ Highest 115℃ (NQ) Lowest -30℃ ~ Highest 100℃

SMALLER OUTSIDE DIA.SANFLEKI ROBO TYPE NP (PA) / TYPE NQ (PP)



Smaller outside dia. SANFLEKI ROBO

- Non-metallic corrugated flexible conduit
- Connectable fitting: Available on request
- Mainly for automobiles



[BLACK]

Delivery		Item number		Outside dia.	Inside dia.	Min Bend Radius R		Weight (kg)		M per coil
NP	NQ	PA	PP			For fixed installation	For flexing cycle	Per M	Per coil	
○	○	NP 5	NQ 5	5.1	3.0	8	15	0.007	0.7	100
○	○	NP 7	NQ 7	7.5	4.7	8	15	0.013	1.3	100
○	—	NP 9	—	9.0	5.8	16	35	0.014	1.4	100
○	○	NP 10	NQ 10	10.2	7.1	20	45	0.017	1.7	100
☑	☑	NP 14	NQ 14	14.1	10.7	30	70	0.029	1.45	50
☑	☑	NP 17	NQ 17	17.5	13.2	40	80	0.04	2.0	50

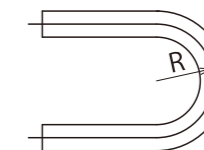
TEMPERATURE RANGE FOR FIXED INSTALLATION Lowest -40℃ ~ Highest 115℃ (N2P)	TEMPERATURE RANGE FOR FIXED INSTALLATION Lowest -30℃ ~ Highest 100℃ (N2Q)
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Type N2P (SLIT TYPE) / N2Q (SLIT TYPE)



Smaller outside dia. SANFLEKI ROBO slit type

- Non-metallic corrugated flexible conduit
- Slit type
- Cable insertion tool :Refer to Cable insertion tool section

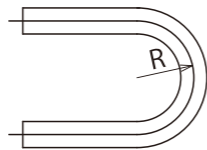
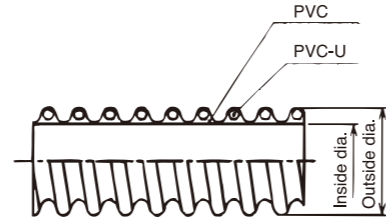


Delivery		Item number		Outside dia.	Inside dia.	Min Bend Radius R		Weight (kg)		M per coil
N2P	N2Q	PA	PP			For fixed installation	Per M	Per coil		
○	—	N2P 5	N2Q 5	5.1	3.0	10	0.007	0.7	100	
○	○	N2P 7	N2Q 7	7.5	4.7	10	0.013	1.3	100	
○	—	N2P 9	—	9.0	5.8	20	0.014	1.4	100	
○	3	N2P 10	N2Q 10	10.2	7.1	20	0.017	1.7	100	
○	○	N2P 14	N2Q 14	14.1	10.7	30	0.029	1.45	50	
☑	☑	N2P 17	N2Q 17	17.5	13.2	40	0.04	2.0	50	

SANFLEKI NT

Type NT

MATERIAL	COLOR	FEATURE	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE FOR FLEXING CYCLE	TEMPERATURE RANGE FOR FIXED INSTALLATION
PVC	Black	IP67	Limited water resistance	RoHS	UL94V2	Lowest -5°C ~ Highest 60°C	Lowest -25°C ~ Highest 60°C



Non-metallic flexible conduit - PVC - Reinforced construction

- Non-metallic flexible conduit
- Spiral reinforcement
- Designed for machinery and plant installation
- Also suitable for torsional movement
- Comply with JIS C8461-23
- Smaller bending radius makes it possible for conduit installation to be efficient and reduce workload
- Earth bonding is not required
- Cables shall be inserted
- Connectable fitting: NT SERIES / NT2 SERIES FITTING

[BLACK]

Delivery	Item number	Outside dia.	Inside dia.	Min Bend Radius R		Connectable thread				Weight (kg)		M per coil
				For fixed installation	For flexing cycle	G Thread	Metric Thread	Pg Thread	CTC Thread	Per M	Per coil	
☉	NT 16	16.0	10.6	50	100	—	M16/M20	Pg11	—	0.08	2.4	30
☉	NT 20	20.0	14.2	60	120	G1/2(G16)	M20	Pg16/Pg13.5	CTC19	0.12	3.6	30
☉	NT 25	25.0	18.6	70	140	G3/4(G22)	M25	Pg21	CTC25	0.17	5.1	30
☉	NT 32	32.0	25.0	110	220	G1(G28)	M32	Pg29	CTC31	0.24	7.2	30
☉	NT 40	40.0	32.0	130	260	G1-1/4(G36)	M40	Pg36	CTC39	0.34	10.2	30
☉	NT 50	50.0	42.4	160	320	G1-1/2(G42)	M50	Pg42	CTC51	0.45	13.5	30
☉	NT 63	63.0	54.4	230	460	G2(G54)	M63	Pg48	CTC63	0.74	14.8	20
☉	NT 73	73.0	63.0	350	700	G2-1/2(G70)	—	—	CTC75	1.06	21.2	20

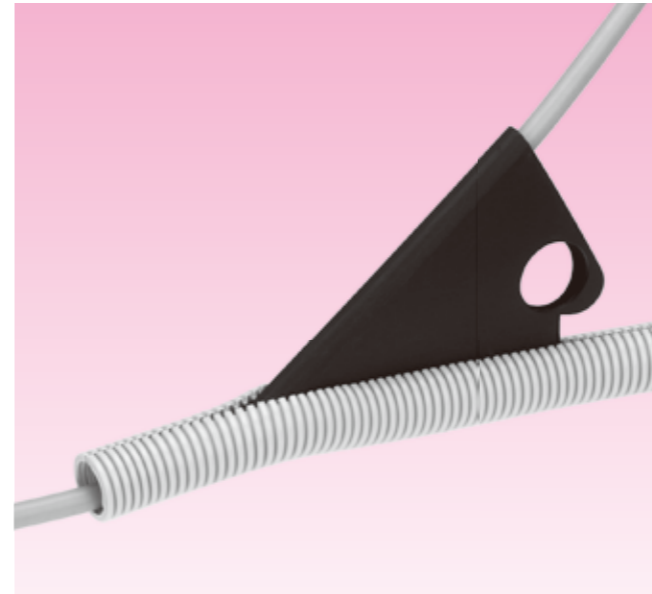
MATERIAL	ENVIRONMENT
PA66	HALOGEN FREE

INSERTION TOOL FOR SANFLEKI ROBO SLIT TYPE



Insertion tool for SANFLEKI ROBO Slit type

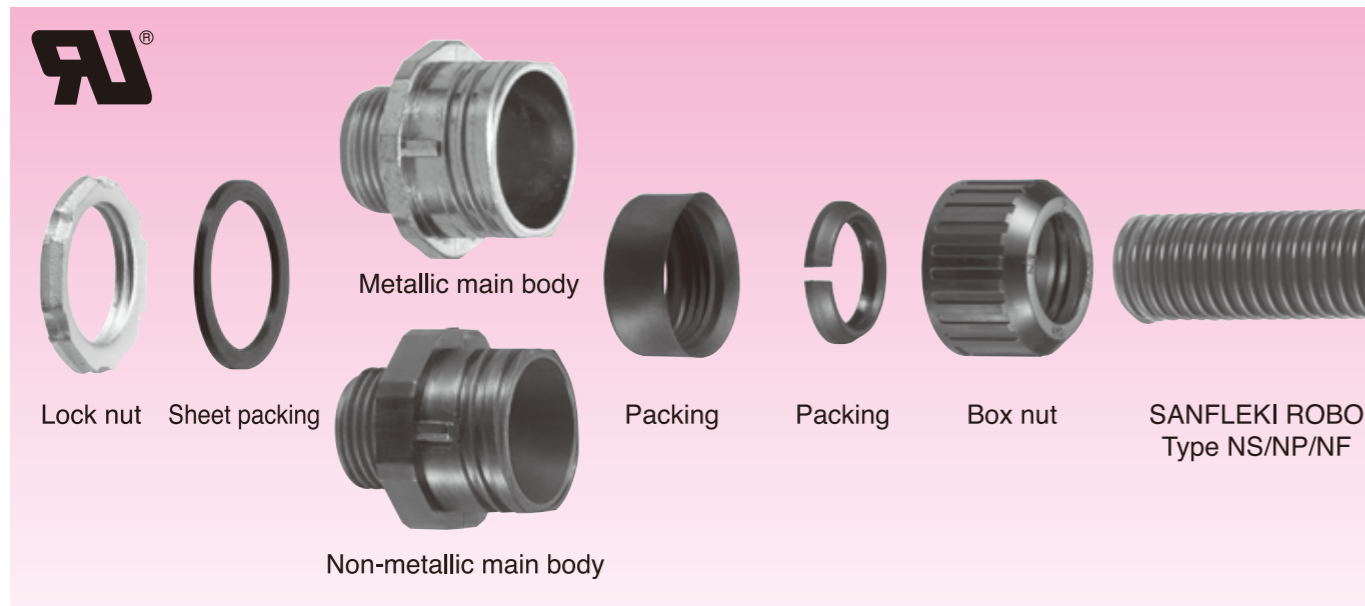
- Designed to insert cable(s) into SANFLEKI ROBO
- Refer to the photo for use



Delivery	Item number	Suitable SANFLEKI ROBO	Weight (g/pc)
☉	SFTL 270	N2P,N2Q 7~10	4
☉	SFTL 271	N2S,N2P,N2F,N2Q 12~40	12

N2 SERIES FITTING

CONSTRUCTION



FEATURE

- No tool is required in order to tighten up Box nut
- Box nut can be tightened up by hand
- Its unique structure prevents Box nut from getting loosened

CONNECTABLE SANFLEKI ROBO

Connectable SANFLEKI ROBO is as indicated in the chart

CONNECTABLE SANFLEKI ROBO	備考
NS/NP/NF/NRS/NRF	

COLOR

- Black
- Available on request : Light gray

MATERIALS

Material information is as below unless otherwise specified

PART NAME	MATERIAL	FINISH
MAIN BODY	PA	-
	ZDC	ELECTROPLATED ZINC
BOX NUT	PA	-
PACKING	PA	-
PACKING	NBR	-
SHEET PACKING	NBR	-
LOCK NUT	SPHC	ELECTROPLATED ZINC

SAFEKEEPING

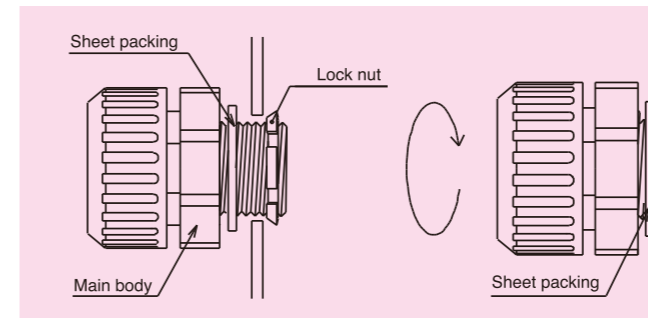
- In terms of Light gray types; take them out of shipping cartons and keep them by the different means of storage as soon as goods are delivered . Otherwise, the goods are likely to yellow.

INSTRUCTION FOR ASSEMBLY / DISCONNECTION OF N2 SERIES AND SANFLEKIROBO

ASSEMBLY INSTRUCTION

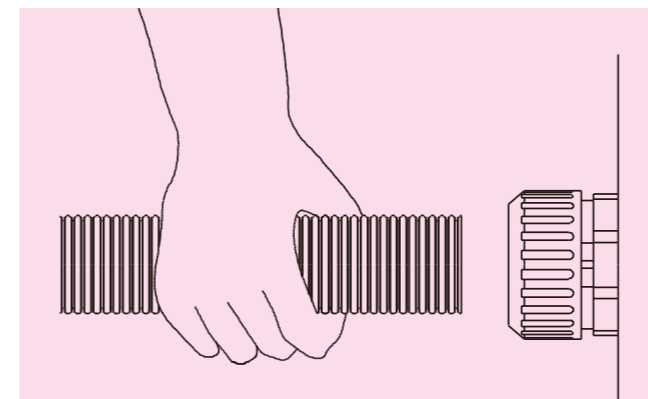
1. Connect a fitting to an installation place

- Note: Box nut does not need to be disconnected
- Note: Sheet packing shall be used for the water resistance when a fitting is to be connected to a knockout of a wiring box or to a electric device (Refer to the drawing)



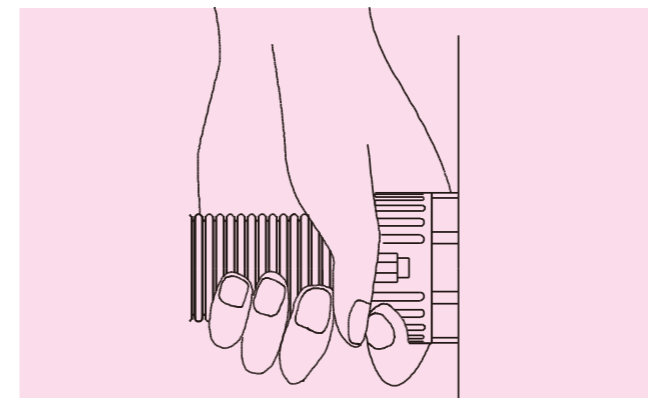
2. Insert SANFLEKI ROBO into a fitting

- 1) While rotating SANFLEKI ROBO, insert it into the fitting as deep as possible.
- Note: If SANFLEKI ROBO is not positioned deeply enough inside the fitting, it may cause the water resistance to worsen.



3. Tighten a box nut

- 1) Tighten up the box nut until it reaches the main body flange of the fitting and clicks



- 2) After tightening the box nut, try to loosen up the box nut in order to make sure that the box nut is completely tightened.
- Note: Even if fitting-connected SANFLEKI ROBO is required and delivered, make sure to follow the instruction from 2 through 3.

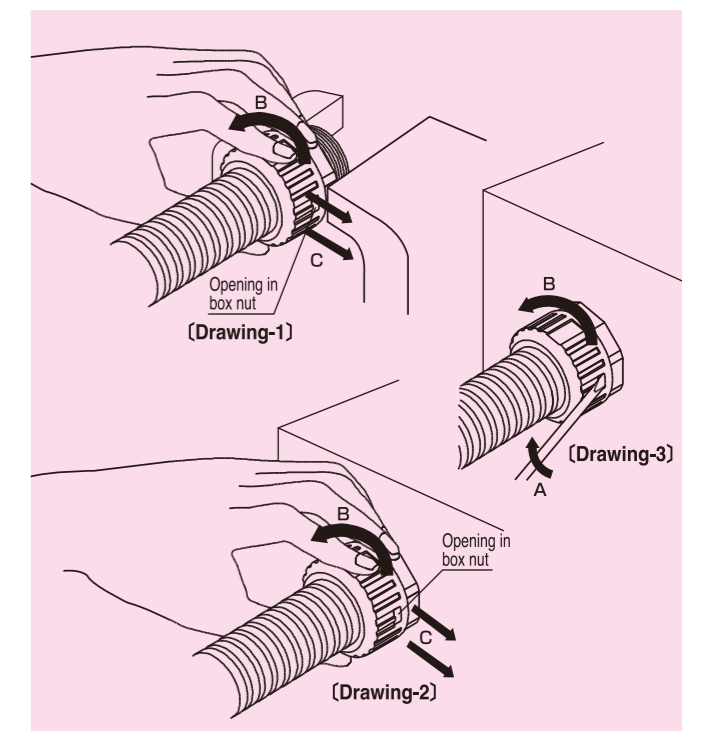
DISCONNECTION INSTRUCTION

1. When a fitting has not been connected to an installation place (Refer to Drawing-1)

- 1) Hold a fitting with a vice (Refer to Drawing-1)
- 2) Hold and press the 2 flat areas of the box nut very hard by hand (fingers)
- 3) While pushing the box nut toward the direction C, rotate it toward the direction B by hand so that the box nut gets loosened.
 - * If impossible to loosen the box nut by hand, use pliers
- 4) Rotate the box nut about a 180 degree angle
- 5) After finding the box nut stops rotating, follow the instruction from 2) and 4) so that the box nut and PA packing come off

2. When a fitting has already been connected to an installation place (refer to Drawing-2 and Drawing-3)

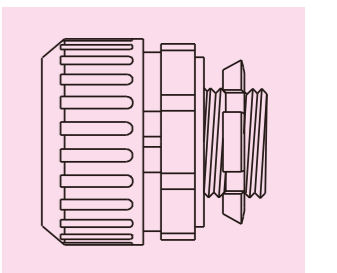
- Note: do not disconnect the fitting from the installation place
- 1) Hold and press the 2 flat areas of the box nut very hard by hand /fingers (Refer to Drawing-2)
 - 2) While pushing the box nut toward the direction C, rotate it toward the direction B by hand so that the box nut gets loosened. (Refer to Drawing-2)
 - *If impossible to loosen the box nut, insert a screwdriver(flat-shaped end) into the opening in box nut. Then while pushing the screwdriver toward the direction A, rotate the box nut toward the direction B by hand (Refer to Drawing-3)
 - 3) Rotate the box nut about a 180 degree angle
 - 4) After finding the box nut stops rotating, follow the instruction from 1) and 3) so that the box nut and PA packing come off



Note: Flat-shaped end of screwdriver may come off while taking an action for 2). Therefore, take an appropriate preventive measure to avoid any injury

3. Assembly of a fitting / The condition ready to insert SANFLEKI ROBO into the fitting

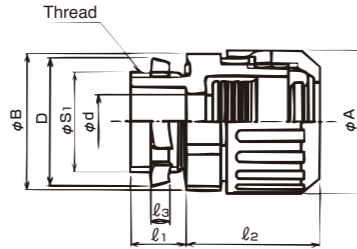
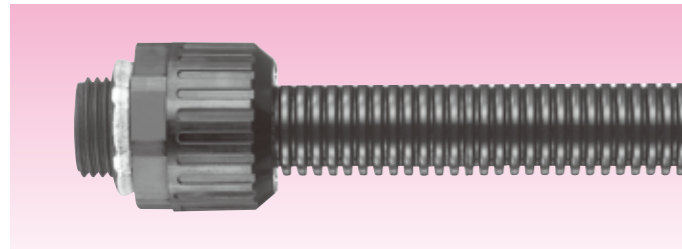
- Note: Make sure that the larger flat surface of PA packing shall face the main body when assembling the parts
- 1) Assemble all parts and rotate the box nut about a 180 degree angle until it makes the 1st short, sharp sound so that the fitting gets provisionally fixed and ready for the insertion of SANFLEKI ROBO



N2 SERIES FITTING FOR KNOCKOUT

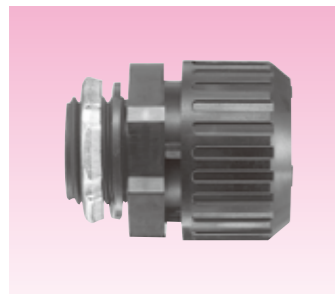
MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

PARALLEL PIPE THREAD - EXTERNAL THREAD



- Straight connectors
- Designed for knockout of wiring boxes
- Tensile Strength Classification: Between SANFLEKI ROBO size 16~63 and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

REGULAR TYPE

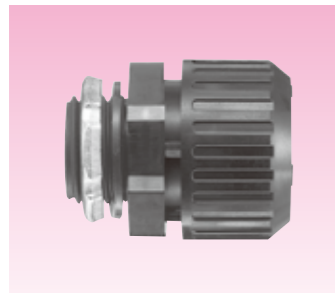


[BLACK / LIGHT GRAY]

Delivery	Item number (Black)	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BG 12	12	7	25.5	29.9	8.1	12	27	3.8	20.9	G1/2	19	20
○	N2BG 16	16	10	29.9	29.9	11.4	12	27	3.8	20.9	G1/2	20	20
○	N2BG 20	20	14	34.4	34.4	14.5	12	28	3.8	20.9	G1/2	24	20
○	N2BG 25	25	19	40.8	40.8	19.6	12	32	3.8	26.4	G3/4	34	20
○	N2BG 32	32	25	48.3	48.3	25.7	14	32	4.5	33.2	G 1	51	10
○	N2BG 40	40	33	57.3	57.3	33.7	14	36	4.5	41.9	G1-1/4	72	10
○	N2BG 50	50	39	67.7	67.7	39.7	16	37	5.0	47.8	G1-1/2	96	5
○	N2BG 63	63	51	80.9	80.9	51.6	16	41	5.0	59.6	G 2	128	5

Should Light gray type be required, add LG to item no. of Black type (e.g. Light gray type item no. N2BG20 LG)

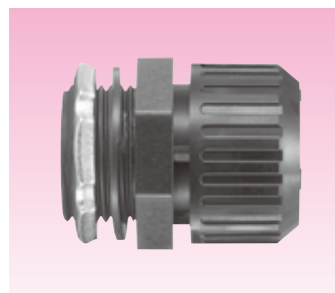
EUROPEAN SIZE



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BG 16	16	10	29.9	29.9	11.4	12	27	3.8	20.9	G1/2	20	20
○	N2BG 21	21	14	34.0	34.0	15.0	12	27	3.8	20.9	G1/2	22	20
○	N2BG 28	28	20	42.7	42.7	20.6	12	32	3.8	26.4	G3/4	35	20
○	N2BG 34	34	25	49.0	49.0	26.2	14	32	4.5	33.2	G1	50	10
○	N2BG 42	42	33	60.3	60.3	34.0	14	36	4.5	41.9	G1-1/4	76	10
○	N2BG 54	54	46	71.4	74.0	48.0	16	37	5.0	59.6	G2	109	5

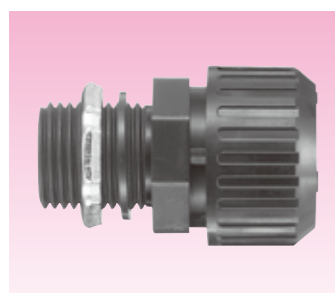
IRREGULAR THREAD TYPE



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BG 12 12	12	7	25.5	29.9	8.1	12	27	3.0	16.6	G3/8	15	20
○	N2BG 16 12	16	10	29.9	29.9	10.9	12	27	3.0	16.6	G3/8	17	20
○	N2BG 16 22	16	10	29.9	29.9	11.4	12	27	3.8	26.4	G3/4	27	20
○	N2BG 20 22	20	14	34.4	37.9	15.1	12	28	3.8	26.4	G3/4	28	20
○	N2BG 20 28	20	14	34.4	46.4	15.1	14	28	4.5	33.2	G1	43	20
○	N2BG 25 16	25	14	40.8	40.8	14.5	12	32	3.8	20.9	G1/2	32	20
○	N2BG 25 28	25	19	40.8	46.4	19.8	14	32	4.5	33.2	G1	48	20
③	N2BG 40 54	40	33	57.3	74.4	33.7	16	36	5.0	59.6	G2	90	10

LONG THREAD TYPE



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
③	N2BG 16 L21	16	10	29.9	29.9	11.4	21	27	3.8	20.9	G1/2	22	20
○	N2BG 20 L21	20	14	34.4	34.4	14.4	21	28	3.8	20.9	G1/2	26	20
③	N2BG 25 L21	25	19	40.8	40.8	19.5	21	32	3.8	26.4	G3/4	37	20
○	N2BG 32 L24	32	25	48.3	48.3	25.5	24	32	4.5	33.2	G1	53	10
○	N2BG 40 L24	40	33	57.3	57.3	33.5	24	36	4.5	41.9	G1-1/4	75	10
③	N2BG 50 L24	50	39	67.7	67.7	39.6	24	37	5.0	47.8	G1-1/2	99	5

N2 SERIES FITTING FOR KNOCKOUT

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

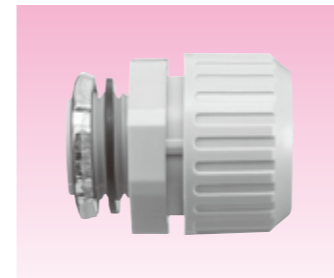
METRIC THREAD - EXTERNAL THREAD



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BM 12 16	12	7	25.5	29.9	8.1	10	27	3.0	15.9	M16×1.5	20	20
○	N2BM 12	12	7	25.5	29.9	8.1	10	27	3.6	19.9	M20×1.5	20	20
○	N2BM 16 16	16	10	29.9	29.9	10.1	10	27	3.0	15.9	M16×1.5	20	20
○	N2BM 16	16	10	29.9	29.9	11.4	10	27	3.6	19.9	M20×1.5	21	20
○	N2BM 20	20	14	34.4	34.4	14.7	10	28	3.6	19.9	M20×1.5	25	20
○	N2BM 25	25	18	40.8	40.8	18.9	10	32	3.6	24.9	M25×1.5	36	20
○	N2BM 32	32	25	48.3	48.3	25.9	12	32	4.5	31.9	M32×1.5	54	10
○	N2BM 40	40	33	57.3	57.3	33.5	12	36	4.5	39.9	M40×1.5	74	10
○	N2BM 50	50	42	67.7	67.7	43.2	14	37	5.0	49.9	M50×1.5	100	5
③	N2BM 63	63	55	80.9	80.9	55.6	14	41	5.0	62.9	M63×1.5	125	5

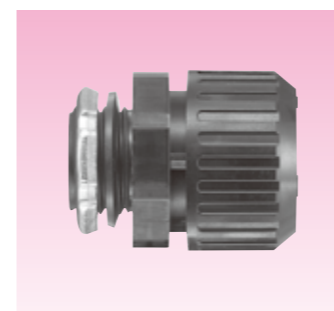
OTHER COLOR TYPE



[LIGHT GRAY]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
③	N2BM 12 LG	12	7	19.9	M20×1.5	20	20						
○	N2BM 16 LG	16	10	19.9	M20×1.5	22	20						
○	N2BM 20 LG	20	14	19.9	M20×1.5	25	20						
○	N2BM 25 LG	25	18	24.9	M25×1.5	36	20						
○	N2BM 32 LG	32	25	31.9	M32×1.5	54	10						
○	N2BM 40 LG	40	33	39.9	M40×1.5	74	10						
③	N2BM 50 LG	50	42	49.9	M50×1.5	100	5						
③	N2BM 63 LG	63	55	62.9	M63×1.5	125	5						

NPT THREAD - EXTERNAL THREAD

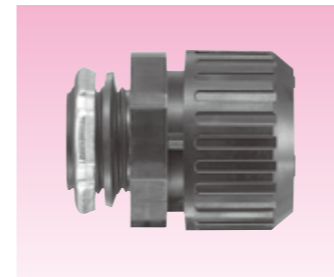


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Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread ANSI B 1.20.1		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
③	N2BT 12	12	7	25.5	29.9	8.1	12	27	3.8	21.2	NPT 1/2	19	20
○	N2BT 16	16	10	29.9	29.9	11.4	12	27	3.8	21.2	NPT 1/2	20	20
○	N2BT 20	20	13	34.4	34.4	14.2	12	28	3.8	21.2	NPT 1/2	25	20
○	N2BT 25	25	18	40.8	40.8	19.1	12	32	4.5	26.5	NPT 3/4	39	20
○	N2BT 32	32	24	48.3	48.3	25.0	14	32	4.5	33.2	NPT 1	50	10
○	N2BT 40	40	32	57.3	57.3	33.3	14	36	4.5	41.9	NPT 1-1/4	71	10
○	N2BT 50	50	38	67.7	67.7	39.4	16	37	5.0	48.0	NPT 1-1/2	95	5
③	N2BT 63	63	51	80.9	80.9	51.9	16	41	5.0	60.1	NPT 2	126	5

SCREW THREAD FOR RIGID METAL CONDUIT AND FITTING - EXTERNAL THREAD

REGULAR TYPE



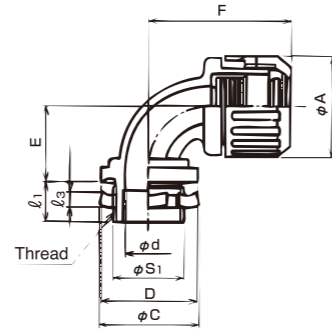
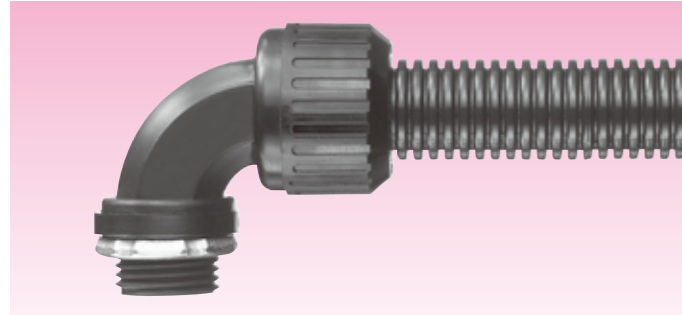
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Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS C 8305		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BC 12	12	7	25.5	29.9	8.1	12	27	3.2	19.1	CTC 19	16	20
○	N2BC 16	16	10	29.9	29.9	11.4	12	27	3.2	19.1	CTC 19	18	20
○	N2BC 20	20	13	34.4	34.4	13.7	12	28	3.2	19.1	CTC 19	21	20
○	N2BC 25	25	19	40.8	40.8	19.6	12	32	3.2	25.4	CTC 25	33	20
○	N2BC 32	32	25	48.3	48.3	25.7	14	32	3.8	31.8	CTC 31	44	10
○	N2BC 40	40	31	57.3	57.3	31.9	14	36	3.8	38.1	CTC 39	63	10
○	N2BC 50	50	42	67.7	67.7	43.0	16	37	5.0	50.8	CTC 51	96	5
○	N2BC 63	63	54	80.9	80.9	55.1	16	41	5.0	63.5	CTC 63	130	5

N2 SERIES 90 DEGREE ANGLE STYLE FITTING FOR KNOCKOUT

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

PARALLEL PIPE THREAD - EXTERNAL THREAD



- 90 degree angle-style connectors
- Designed for knockout of wiring boxes
- Tensile Strength Classification: Between SANFLEKI ROBO size 16 ~ 63 and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

REGULAR TYPE

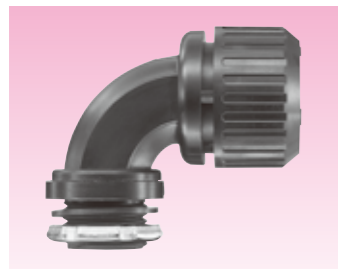


[BLACK / LIGHT GRAY]

Delivery	Item number (Black)	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
○	N29BG 12	12	7	25.5	29.0	8.1	22	39	12	3.8	20.9	G 1/2	22	20
○	N29BG 16	16	10	29.9	29.0	11.4	24	41	12	3.8	20.9	G 1/2	25	20
○	N29BG 20	20	14	34.4	29.0	14.7	26	45	12	3.8	20.9	G 1/2	30	20
○	N29BG 25	NS	25	40.8	37.0	19.8	28	51	12	3.8	26.4	G 3/4	45	10
○	N29BG 32	NP	32	48.3	45.5	25.9	32	54	14	4.5	33.2	G 1	66	10
○	N29BG 40	NF	40	57.3	56.0	33.7	37	62	14	4.5	41.9	G 1-1/4	94	10
○	N29BG 50		50	67.7	64.0	40.0	43	71	16	5.0	47.8	G 1-1/2	132	5
○	N29BG 63		63	80.9	77.6	51.8	51	83	16	5.0	59.6	G 2	185	5

Should Light gray type be required, add LG to item no. of Black type (e.g. Light gray type item no. N29BG20 LG)

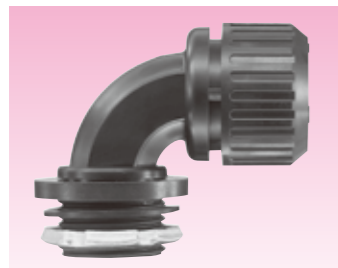
EUROPEAN SIZE



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
○	N29BG 16	16	10	29.9	29.0	11.4	24	41	12	3.8	20.9	G 1/2	25	20
○	N29BG 21		21	34.0	30.1	15.0	27	46	12	3.8	20.9	G 1/2	30	20
○	N29BG 28	NS	28	42.7	37.0	20.6	30	52	12	3.8	26.4	G 3/4	46	10
○	N29BG 34		34	49.0	45.1	26.3	34	56	14	4.5	33.2	G 1	68	10
○	N29BG 42		42	60.3	55.6	34.1	39	65	14	4.5	41.9	G 1-1/4	102	10
○	N29BG 54		54	71.4	74.0	47.5	46	74	16	5.0	59.6	G 2	154	5

IRREGULAR THREAD TYPE



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
□	N29BG 12 12	12	7	25.5	25.8	8.1	22	39	12	3.0	16.6	G 3/8	—	10
○	N29BG 16 12	16	10	29.9	11.3	11.3	24	41	12	3.0	16.6	G 3/8	21	10
○	N29BG 16 22		16	29.9	37.0	11.4	24	41	12	3.8	26.4	G 3/4	31	10
○	N29BG 20 22		20	34.4	37.0	15.1	26	45	12	3.8	26.4	G 3/4	35	10
○	N29BG 20 28	NS	20	40.8	45.5	19.8	28	51	12	4.5	33.2	G 1	48	10
○	N29BG 25 28	NP	25	48.3	45.5	19.8	28	51	14	4.5	33.2	G 1	59	10
○	N29BG 32 36	NF	32	57.3	56.0	26.1	32	54	14	4.5	41.9	G 1-1/4	77	5
○	N29BG 40 28		40	67.7	62.0	34.1	43	71	14	4.5	41.9	G 1-1/4	126	2
□	N29BG 40 54		40	57.3	74.8	33.7	40	62	16	5.0	59.6	G 2	136	5
○	N29BG 50 36		50	67.7	62.0	34.1	43	71	14	4.5	41.9	G 1-1/4	126	2
□	N29BG 63 70		63	80.9	95.7	55.1	51	83	18	5.0	75.1	G 2-1/2	204	2

LONG THREAD TYPE



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
○	N29BG 16 L21	16	10	29.9	29.0	11.4	23	41	21	3.8	20.9	G 1/2	27	10
○	N29BG 20 L21	20	14	34.4	29.0	14.7	25	45	21	3.8	20.9	G 1/2	33	10
□	N29BG 25 L21	NS	25	40.8	37.0	19.8	27	51	21	3.8	26.4	G 3/4	48	10
○	N29BG 32 L24	NP	32	48.3	45.5	26.1	31	54	24	4.5	33.2	G 1	70	5
□	N29BG 40 L24	NF	40	57.3	56.0	33.7	36	62	24	4.5	41.9	G 1-1/4	97	2
□	N29BG 50 L24		50	67.7	64.0	40.3	42	71	24	5.0	47.8	G 1-1/2	135	2

N2 SERIES 90 DEGREE ANGLE STYLE FITTING FOR KNOCKOUT

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

METRIC THREAD - EXTERNAL THREAD



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
□	N29BM 12	12	7	25.5	29.0	8.1	22	39	12	3.6	19.9	M20X1.5	23	20
○	N29BM 16	16	10	29.9	29.0	11.4	24	41	12	3.6	19.9	M20X1.5	26	20
○	N29BM 20	20	13	34.4	29.0	14.3	26	45	12	3.6	19.9	M20X1.5	31	20
○	N29BM 25	NS	25	40.8	36.0	18.2	28	51	12	3.6	24.9	M25X1.5	48	20
○	N29BM 32	NP	32	48.3	44.1	25.6	32	54	14	4.5	31.9	M32X1.5	70	10
□	N29BM 40	NF	40	57.3	53.1	33.2	37	62	14	4.5	39.9	M40X1.5	92	10
□	N29BM 50		50	67.7	65.0	43.0	43	71	16	5.0	49.9	M50X1.5	130	5
□	N29BM 63		63	80.9	79.0	55.1	51	83	16	5.0	62.9	M63X1.5	183	5

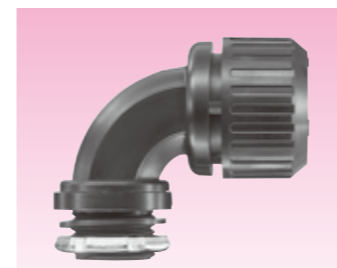
OTHER COLOR TYPE



[LIGHT GRAY]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
□	N29BM 12 LG	12	7	19.9	M20X1.5	23	20							
○	N29BM 16 LG	16	10	19.9	M20X1.5	26	20							
○	N29BM 20 LG	20	13	19.9	M20X1.5	31	20							
○	N29BM 25 LG	NS	25	17	24.9	M25X1.5	48	20						
□	N29BM 32 LG	NP	32	25	31.9	M32X1.5	70	10						
□	N29BM 40 LG	NF	40	32	39.9	M40X1.5	92	10						
□	N29BM 50 LG		50	42	49.9	M50X1.5	130	5						
□	N29BM 63 LG		63	54	62.9	M63X1.5	183	5						

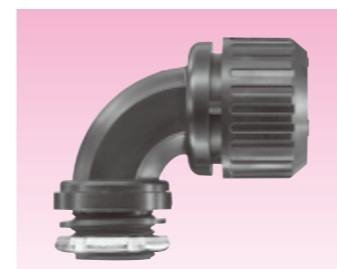
NPT THREAD - EXTERNAL THREAD



[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread ANSI B 1.20.1		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
□	N29BT 12	12	7	25.5	29.0	8.1	21	39	13	3.8	21.2	NPT 1/2	26	20
□	N29BT 16	16	10	29.9	29.0	11.4	23	41	13	3.8	21.2	NPT 1/2	29	20
□	N29BT 20	20	13	34.4	29.0	14.2	25	45	13	3.8	21.2	NPT 1/2	36	20
□	N29BT 25	NS	25	40.8	37.0	19.1	27	51	14	4.5	26.5	NPT 3/4	52	20
□	N29BT 32	NP	32	48.3	45.5	25.0	31	54	15	4.5	33.2	NPT 1	76	10
□	N29BT 40	NF	40	57.3	56.0	33.3	36	62	16	4.5	41.9	NPT 1-1/4	114	10
□	N29BT 50		50	67.7	64.0	39.4	42	71	16	5.0	48.0	NPT 1-1/2	154	5
□	N29BT 63		63	80.9	77.6	51.9	49	83	18	5.0	60.1	NPT 2	207	5

SCREW THREAD FOR RIGID METAL CONDUIT AND FITTING - EXTERNAL THREAD



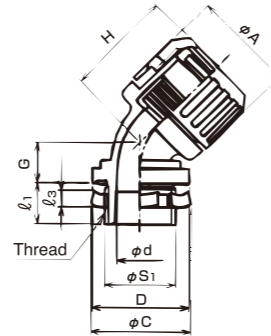
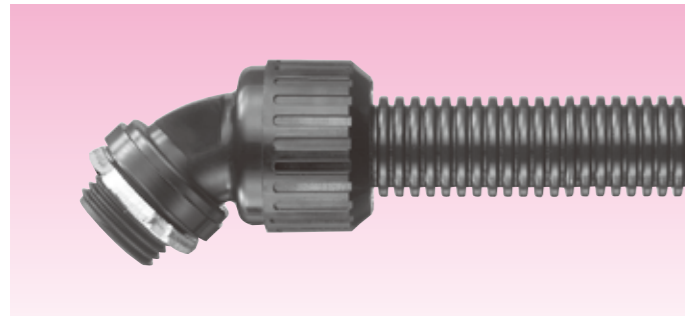
[BLACK]

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l3	Thread JIS C 8305		Weight (g/pc)	Qty / Package
											φS1	Nominal size		
□	N29BC 12	12	7	25.5	28.8	8.1	21	39	13	3.2	19.1	CTC19	22	20
○	N29BC 16	16	10	29.9	28.8	11.4	23	41	13	3.2	19.1	CTC19	24	20
○	N29BC 20	20	13	34.4	28.8	13.5	25	45	13	3.2	19.1	CTC19	29	20
○	N29BC 25	NS	25	40.8	37.0	19.4	27	51	14	3.2	25.4	CTC25	45	20
○	N29BC 32	NP	32	48.3	45.5	25.7	31	54	15	3.8	31.8	CTC31	63	10

N2 SERIES 45 DEGREE ANGLE STYLE FITTING FOR KNOCKOUT

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~Highest 90°C

PARALLEL PIPE THREAD - EXTERNAL THREAD



- 45 degree angle-style connectors
- Designed for knockout of wiring boxes
- Tensile Strength Classification:
Between SANFLEKI ROBO size 16 ~ 63 and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO:
Refer to the chart

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

REGULAR TYPE



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	G	H	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
												φS1	Nominal size		
○	N24BG 12	12	7	25.5	29.0	8.1	13	30	12	3.8	20.9	G 1/2	24	20	
○	N24BG 16	16	10	29.9	29.0	11.4	14	31	12	3.8	20.9	G 1/2	24	20	
○	N24BG 20	20	14	34.4	29.0	14.7	14	33	12	3.8	20.9	G 1/2	28	20	
○	N24BG 25	NS	25	40.8	37.0	19.8	16	39	12	3.8	26.4	G 3/4	41	20	
○	N24BG 32	NP	32	48.3	45.5	25.9	18	40	14	4.5	33.2	G 1	60	10	
○	N24BG 40	NF	40	57.3	56.0	33.7	20	45	14	4.5	41.9	G 1-1/4	85	10	
○	N24BG 50		50	67.7	64.0	40.0	22	49	16	5.0	47.8	G 1-1/2	114	5	
○	N24BG 63		63	77.6	77.6	51.8	25	57	16	5.0	59.6	G 2	163	5	

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

OTHER COLOR TYPE



[LIGHT GRAY]

Deliv-ery	Item number	Thread JIS B 0202		Weight (g/pc)	Qty / Package
		φS1	Nominal size		
○	N24BG 12 LG	20.9	G 1/2	21	20
○	N24BG 16 LG	20.9	G 1/2	24	20
○	N24BG 20 LG	20.9	G 1/2	28	20
○	N24BG 25 LG	26.4	G 3/4	41	20
○	N24BG 32 LG	33.2	G 1	60	10
○	N24BG 40 LG	41.9	G 1-1/4	85	10
○	N24BG 50 LG	47.8	G 1-1/2	114	5
○	N24BG 63 LG	59.6	G 2	163	5

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

IRREGULAR THREAD TYPE



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	G	H	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
												φS1	Nominal size		
⑤	N24BG 12 12	12	7	25.5	25.8	11.3	8.1	13	30	12	3.0	16.6	G 3/8	21	20
⑤	N24BG 16 12	16	10	29.9											
⑤	N24BG 16 22	NS	16	29.9	37.0	11.4	14	31	12	3.8	12	16.6	G 3/8	24	20
⑤	N24BG 20 22														
⑤	N24BG 20 28	NP	20	14	34.4	45.5	15.1	14	33	14	4.5	33.2	G 1	46	10
⑤	N24BG 25 28														
⑤	N24BG 25 28	NF	25	19	40.8	45.5	19.8	16	39	14	4.5	33.2	G 1	55	10
⑤	N24BG 40 28														
⑤	N24BG 40 54		40	25	57.3	74.8	33.7	20	45	14	4.5	33.2	G 1	79	5
⑤	N24BG 40 54														

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

LONG THREAD TYPE



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	G	H	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
												φS1	Nominal size		
⑤	N24BG 16 L21	16	10	29.9	29.0	11.4	13	31	21	3.8	20.9	G 1/2	28	10	
⑤	N24BG 20 L21	20	14	34.4	29.0	14.7	13	33	21	3.8	20.9	G 1/2	31	10	
⑤	N24BG 25 L21	NS	25	40.8	37.0	19.8	15	39	21	3.8	26.4	G 3/4	47	10	
⑤	N24BG 32 L24	NP	32	48.3	45.5	26.1	16	40	24	4.5	33.2	G 1	66	5	
⑤	N24BG 40 L24	NF	40	57.3	56.0	33.7	19	45	24	4.5	41.9	G 1-1/4	91	5	
⑤	N24BG 50 L24														
⑤	N24BG 50 L24		50	39	67.7	64.0	40.3	21	49	24	5.0	47.8	G 1-1/2	122	2

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

N2 SERIES 45 DEGREE ANGLE STYLE FITTING FOR KNOCKOUT

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~Highest 90°C

METRIC THREAD - EXTERNAL THREAD



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	G	H	l1	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package	
											φS1	Nominal size			
③	N24BM 12	12	7	25.5	29.0	8.1	13	30	12	3.6	19.9	M20X1.5	22	20	
○	N24BM 16	16	10	29.9	29.0	11.4	14	31	12	3.6	19.9	M20X1.5	25	20	
○	N24BM 20	20	13	34.4	29.0	14.3	14	33	12	3.6	19.9	M20X1.5	29	20	
○	N24BM 25	NS	25	40.8	36.0	18.4	16	39	12	3.6	24.9	M25X1.5	44	20	
③	N24BM 32	NP	32	48.3	44.1	25.9	18	40	14	4.5	31.9	M32X1.5	63	10	
③	N24BM 40	NF	40	57.3	53.1	33.5	20	45	14	4.5	39.9	M40X1.5	88	10	
③	N24BM 50														
③	N24BM 63		63	54	80.9	79.0	55.1	25	57	16	5.0	62.9	M63X1.5	180	5

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

OTHER COLOR TYPE



[LIGHT GRAY]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	Thread JIS C 8463		Weight (g/pc)	Qty / Package	
				φS1	Nominal size			
③	N24BM 12 LG	12	7	19.9	M20X1.5	22	20	
○	N24BM 16 LG	16	10	19.9	M20X1.5	25	20	
○	N24BM 20 LG	20	13	19.9	M20X1.5	29	20	
○	N24BM 25 LG	NS	25	17	24.9	M25X1.5	44	20
③	N24BM 32 LG	NP	32	25	31.9	M32X1.5	63	10
③	N24BM 40 LG	NF	40	33	39.9	M40X1.5	88	10
③	N24BM 50 LG							
③	N24BM 63 LG		63	54	62.9	M63X1.5	180	5

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

NPT THREAD - EXTERNAL THREAD



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	G	H	l1	l3	Thread ANSI B 1.20.1		Weight (g/pc)	Qty / Package	
											φS1	Nominal size			
⑤	N24BT 12	12	7	25.5	29.0	8.1	12	30	13	3.8	21.2	NPT 1/2	22	20	
○	N24BT 16	16	10	29.9	29.0	11.4	13	31	13	3.8	21.2	NPT 1/2	25	20	
○	N24BT 20	20	13	34.4	29.0	14.2	13	33	13	3.8	21.2	NPT 1/2	29	20	
○	N24BT 25	NS	25	40.8	37.0	19.1	15	39	14	4.5	26.5	NPT 3/4	44	20	
⑤	N24BT 32	NP	32	48.3	45.5	25.0	16	40	15	4.5	33.2	NPT 1	63	10	
⑤	N24BT 40														
⑤	N24BT 50		40	32	57.3	56.0	33.3	19	45	16	4.5	41.9	NPT 1-1/4	88	10
⑤	N24BT 63		63	51	80.9	77.6	51.9	24	57	18	6.0	60.1	NPT 2	176	5

FileNo.167112	QUALITY STANDARD	QUALITY STANDARD
	UL94V2	JIS C8461-23

SCREW THREAD FOR RIGID METAL CONDUIT AND FITTING - EXTERNAL THREAD



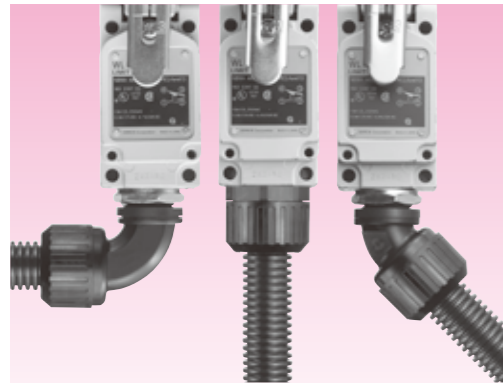
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Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	G	H	l1	l3	Thread JIS C 8305		Weight (g/pc)	Qty / Package	
											φS1	Nominal size			
⑤	N24BC 12	12	7	25.5	28.8	8.1	12	30	13	3.2	19.1	CTC19	22	20	
⑤	N24BC 16	16	10	29.9	28.8	11.4	13	31	13	3.2	19.1	CTC19	25	20	
○	N24BC 20	20	13	34.4	28.8	13.7	13	33	13	3.2	19.1	CTC19	29	20	
○	N24BC 25	NS	25	19	40.8	37.0	19.8	15	39	14	3.2	25.4	CTC25	44	20
③	N24BC 32	NP	32	25	48.3	45.5	26.0	16	40	15	3.8	31.8	CTC31	63	10

N2 SERIES FITTING FOR ELECTRIC DEVICES

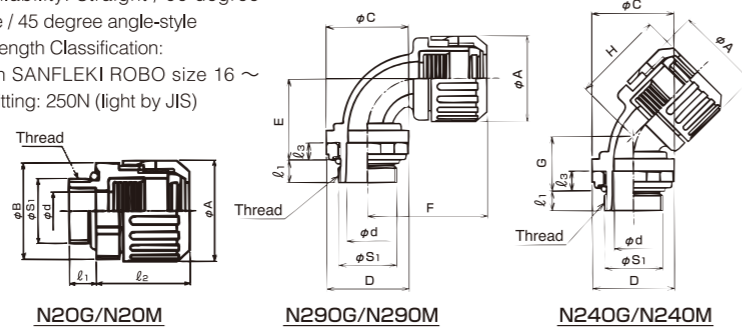
MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

FOR ELECTRIC DEVICES



- Connectors
- Designed for electric devices such as Limit switch
- Style Availability: Straight / 90 degree angle-style / 45 degree angle-style
- Tensile Strength Classification: Between SANFLEKI ROBO size 16 ~ 63 and fitting: 250N (light by JIS)

Connectable SANFLEKI ROBO: Refer to the chart



STRAIGHT STYLE



[CONNECTED TO INTERNAL THREAD - PARALLEL PIPE THREAD] [BLACK / LIGHT GRAY]

Delivery	Item number		Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB	φd	l1	l2	Thread JIS B 0202		Weight (g/pc)	Qty / Package
	Black	Light gray								φS1	Nominal size		
○	○	N20G 12 N20G 12 LG	NS	7	25.5	29.9	8.1	8	27	20.9	G1/2	12	20
○	○	N20G 16 N20G 16 LG											
○	○	N20G 20 N20G 20 LG											
○	○	N20G 25 N20G 25 LG											
○	○	N240G 12 N240G 12 LG	NP	10	29.9	29.9	11.4	8	27	20.9	G1/2	13	20
○	○	N240G 16 N240G 16 LG											
○	○	N240G 20 N240G 20 LG											
○	○	N240G 25 N240G 25 LG											
○	○	N240G 32 N240G 32 LG	NF	14	34.4	34.4	14.7	8	28	20.9	G1/2	17	20
○	○	N240G 16 N240G 16 LG											
○	○	N240G 20 N240G 20 LG											
○	○	N240G 25 N240G 25 LG											

[CONNECTED TO INTERNAL THREAD - METRIC THREAD] [BLACK / LIGHT GRAY]

Delivery	Item number		Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB	φd	l1	l2	Thread JIS C 8463		Weight (g/pc)	Qty / Package
	Black	Light gray								φS1	Nominal size		
○	○	N20M 12 16 N20M 12 16 LG	NS	7	25.5	27.8	8.1	8	27	15.9	M16X1.5	11	20
○	○	N20M 12 N20M 12 LG											
○	○	N20M 16 16 N20M 16 16 LG											
○	○	N20M 16 N20M 16 LG											
○	○	N20M 20 20 N20M 20 20 LG	NP	10	29.9	29.9	11.4	8	27	19.9	M20X1.5	13	20
○	○	N20M 20 N20M 20 LG											
○	○	N20M 25 25 N20M 25 25 LG											
○	○	N20M 25 N20M 25 LG											
○	○	N20M 32 32 N20M 32 32 LG	NF	14	34.4	34.4	13.8	8	28	19.9	M20X1.5	16	20
○	○	N20M 32 N20M 32 LG											
○	○	N20M 40 40 N20M 40 40 LG											
○	○	N20M 40 N20M 40 LG											
○	○	N20M 50 50 N20M 50 50 LG	NF	18	40.8	40.8	18.7	8	32	24.9	M25X1.5	23	20
○	○	N20M 32 N20M 32 LG											
○	○	N20M 40 40 N20M 40 40 LG											
○	○	N20M 50 50 N20M 50 50 LG											

90 DEGREE ANGLE STYLE



[CONNECTED TO INTERNAL THREAD - PARALLEL PIPE THREAD] [BLACK / LIGHT GRAY]

Delivery	Item number		Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	E	F	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
	Black	Light gray											φS1	Nominal size		
○	○	N290G 12 N290G 12 LG	NS	7	25.5	30.0	9.1	25.5	39	8	6	6	20.9	G1/2	22	20
○	○	N290G 16 N290G 16 LG														
○	○	N290G 20 N290G 20 LG														
○	○	N290G 25 N290G 25 LG														
○	○	N290G 32 N290G 32 LG	NP	10	29.9	30.0	12.2	27.5	41	8	6	6	20.9	G1/2	26	20
○	○	N290G 16 N290G 16 LG														
○	○	N290G 20 N290G 20 LG														
○	○	N290G 25 N290G 25 LG														
○	○	N290G 25 N290G 25 LG	NF	14	34.4	28.6	14.7	29.5	45	8	6	6	20.9	G1/2	32	20
○	○	N290G 16 N290G 16 LG														
○	○	N290G 20 N290G 20 LG														
○	○	N290G 25 N290G 25 LG														
○	○	N290G 32 N290G 32 LG	NF	19	40.8	37.0	19.8	32.5	51	8	7	7	26.4	G3/4	48	10
○	○	N290G 16 N290G 16 LG														
○	○	N290G 20 N290G 20 LG														
○	○	N290G 25 N290G 25 LG														

[CONNECTED TO INTERNAL THREAD - METRIC THREAD] [BLACK / LIGHT GRAY]

Delivery	Item number		Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	E	F	l1	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package
	Black	Light gray											φS1	Nominal size		
○	○	N290M 12 16 N290M 12 16 LG	NS	7	25.5	23.4	8.1	25.0	39	7	5.5	5.5	15.9	M16X1.5	20	20
○	○	N290M 12 N290M 12 LG														
○	○	N290M 16 16 N290M 16 16 LG														
○	○	N290M 16 N290M 16 LG														
○	○	N290M 20 20 N290M 20 20 LG	NP	10	29.9	23.5	10.2	27.0	41	7	5.5	5.5	15.9	M16X1.5	26	20
○	○	N290M 16 N290M 16 LG														
○	○	N290M 20 N290M 20 LG														
○	○	N290M 25 N290M 25 LG														
○	○	N290M 32 32 N290M 32 32 LG	NF	14	34.4	28.6	13.5	29.0	45	7	5.5	5.5	19.9	M20X1.5	32	20
○	○	N290M 16 N290M 16 LG														
○	○	N290M 20 N290M 20 LG														
○	○	N290M 25 N290M 25 LG														
○	○	N290M 32 N290M 32 LG	NF	18	40.8	34.0	18.9	31.0	51	7	5.5	5.5	24.9	M25X1.5	47	10
○	○	N290M 16 N290M 16 LG														
○	○	N290M 20 N290M 20 LG														
○	○	N290M 25 N290M 25 LG														
○	○	N290M 32 N290M 32 LG	NF	25	48.3	40.4	25.9	36.0	54	7	5.5	5.5	31.9	M32X1.5	60	10
○	○	N290M 16 N290M 16 LG														
○	○	N290M 20 N290M 20 LG														
○	○	N290M 25 N290M 25 LG														

N2 SERIES FITTING FOR ELECTRIC DEVICES

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

FOR ELECTRIC DEVICES

45 DEGREE ANGLE STYLE



[CONNECTED TO INTERNAL THREAD - PARALLEL PIPE THREAD] [BLACK / LIGHT GRAY]

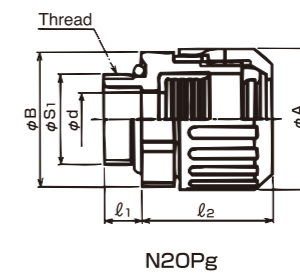
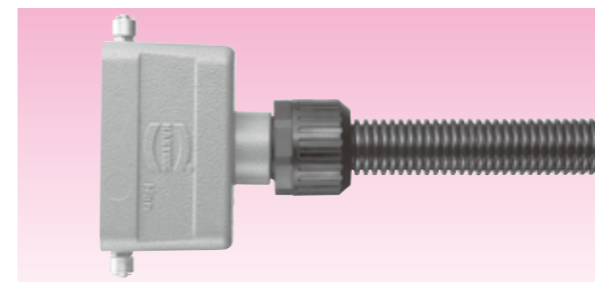
Delivery	Item number		Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	G	H	l1	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
	Black	Light gray											φS1	Nominal size		
○	○	N240G 12 N240G 12 LG	NS	7	25.5	30.0	8.1	17.0	30	8	6	6	20.9	G1/2	21	20
○	○	N240G 16 N240G 16 LG														
○	○	N240G 20 N240G 20 LG														
○	○	N240G 25 N240G 25 LG														
○	○	N240G 12 N240G 12 LG	NP	10	29.9	30.0	11.4	17.4	31	8	6	6	20.9	G1/2	24	20
○	○	N240G 16 N240G 16 LG														
○	○	N240G 20 N240G 20 LG														
○	○	N240G 25 N240G 25 LG														
○	○	N240G 12 N240G 12 LG	NF	14	34.4	28.7	14.7	18.2	33	8	6	6	20.9	G1/2	30	20
○	○	N240G 16 N240G 16 LG														
○	○	N240G 20 N240G 20 LG														
○	○	N240G 25 N240G 25 LG														

[CONNECTED TO INTERNAL THREAD - METRIC THREAD] [BLACK / LIGHT GRAY]

Delivery	Item number		Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC	φD	φd	G	H	l1	l3	Thread JIS C 8463		Weight (g/pc)	Qty / Package
	Black	Light gray											φS1	Nominal size		
○	○	N240M 12 16 N240M 12 16 LG	NS	7	25.5	23.4	8.1	16.5	30	7	5.5	5.5	15.9	M16X1.5	19	20
○	○	N240M 12 N240M 12 LG														
○	○	N240M 16 16 N240M 16 16 LG														
○	○	N240M 16 N240M 16 LG														
○	○	N240M 20 20 N240M 20 20 LG	NP	10	29.9	27.6	11.4	16.9	31	7	5.5	5.5	15.9	M16X1.5	24	20
○	○	N240M 16 N240M 16 LG														
○	○	N240M 20 N240M 20 LG														
○	○	N240M 25 N240M 25 LG														
○	○	N240M 32 N240M 32 LG	NF	13	34.4	28.6	14.3	17.7	33	7	5.5	5.5	19.9	M20X1.5	30	20
○	○	N240M 20 N240M 20 LG														
○	○	N240M 25 N240M 25 LG														
○	○	N240M 32 N240M 32 LG														

N2 SERIES FITTING FOR ELECTRIC DEVICES

CONNECTED TO INTERNAL THREAD - Pg THREAD



- Straight connectors
- Designed for electric devices (Hood)
- Tensile Strength Classification: Between SANFLEKI ROBO size 16 ~ 63 and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

STRAIGHT STYLE



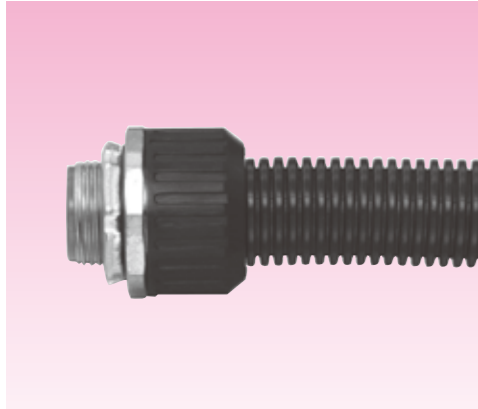
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Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB	φd	l1	l2	Thread DIN 40 430		Weight (g/pc)	Qty / Package
									φS1	Nominal size		
○	N2OPg 12 09	12	7	25.5	29.9	8.1	6	27	15.2	Pg 9	11	20
○	*N2OPg 12 11								18.6	Pg 11	11	20
○	*N2OPg 12 13								20.4	Pg 13.5	12	20
○	*N2OPg 16 09								15.2	Pg 9	13	20
○	N2OPg 16 11	16	10	29.9	29.9	11.4	6	27	18.6	Pg 11	13	20
○	*N2OPg 16 13								20.4	Pg 13.5	13	20
○	*N2OPg 16 16								22.5	Pg 16	13	20
○	*N2OPg 20 11								18.6	Pg 11	16	20
○	*N2OPg 20 13	20	14	34.4	34.4	15.0	7	28	20.4	Pg 13.5	16	20
○	N2OPg 20 16								22.5	Pg 16	17	20
○	*N2OPg 20 21								28.3	Pg 21	17	20
○	*N2OPg 25 13								20.4	Pg 13.5	22	10
○	*N2OPg 25 16	25	16	40.8	40.8	16.8	8	32	22.5	Pg 16	25	10

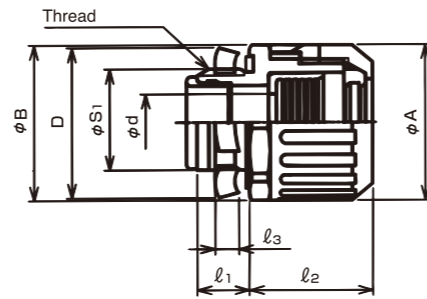
N2 SERIES METALLIC FITTING FOR KNOCKOUT

SURFACE FINISH	SURFACE FINISH	FEATURE	FEATURE	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP67	Oil resistance	Hold up to vibration	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

STRAIGHT STYLE / PARALLEL PIPE THREAD - EXTERNAL THREAD



- Metallic straight connectors
- With Non-metallic box nut (Box nut Color: Black)
- Designed for knockout of wiring boxes
- Tensile Strength Classification:
Between SANFLEKI ROBO and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart



QUALITY STANDARD
JIS C8461-23

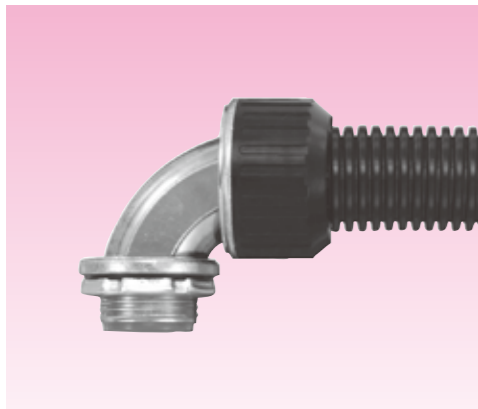
Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BGZ 16	16	10	29.9	29.9	11.4	10	24	3.8	20.9	G1/2	45	20
○	N2BGZ 20	20	13	34.4	34.4	14.1	10	25	3.8	20.9	G1/2	57	20
○	N2BGZ 20 22	20	14	34.4	36.8	15.1	12	25	3.8	26.4	G3/4	67	20
○	N2BGZ 25 16	NS	25	40.8	40.8	14.1	10	28	3.8	20.9	G1/2	80	20
○	N2BGZ 25	NP	25	40.8	40.8	19.8	12	28	3.8	26.4	G3/4	85	20
○	N2BGZ 25 28	NF	25	40.8	45.2	19.8	14	28	4.5	33.2	G 1	110	10
○	N2BGZ 32 36	32	25	48.3	54.6	26.3	14	29	4.5	41.9	G1-1/4	151	10
○	N2BGZ 40 42	40	33	57.3	62.4	33.7	16	31	5.0	47.8	G1-1/2	209	5
○	N2BGZ 50	50	37	67.7	67.7	38.3	16	36	5.0	47.8	G1-1/2	246	5

EUROPEAN SIZE

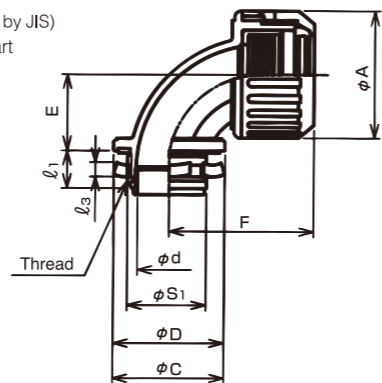
Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB D	φd	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
										φS1	Nominal size		
○	N2BGZ 54	※ 54	46	71.4	74.0	48.0	16.0	37	5.0	59.6	G2	278	5

※NS,NRS,NRF

90 DEGREE ANGLE STYLE / PARALLEL PIPE THREAD - EXTERNAL THREAD



- Metallic 90 degree angle-style connectors
- With Non-metallic box nut (Box nut Color: Black)
- Designed for knockout of wiring boxes
- Tensile Strength Classification:
Between SANFLEKI ROBO and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart



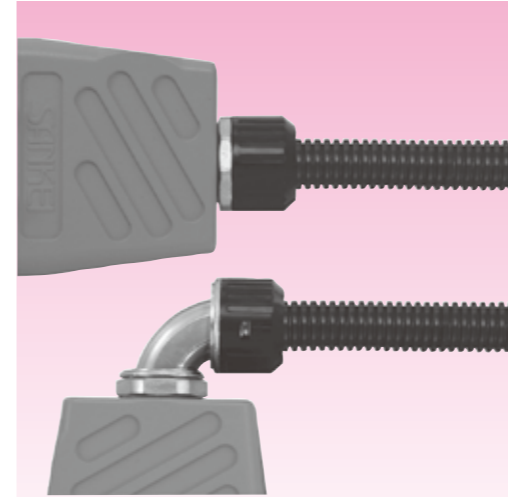
QUALITY STANDARD
JIS C8461-23

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC D	φd	E	F	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
												φS1	Nominal size		
○	N29BGZ 12	12	7	25.5	29.0	8.1	16.2	37	10	3.8	20.9	G 1/2	65	10	
○	N29BGZ 16	16	10	29.9	29.0	11.4	18.6	38	10	3.8	20.9	G 1/2		10	
○	N29BGZ 20	NS	20	34.4	29.0	13.8	19.5	44	10	3.8	20.9	G 1/2		10	
○	N29BGZ 25 16	NP	25	40.8	32.6	14.1	22.8	55	10	3.8	20.9	G 1/2	120	10	
○	N29BGZ 25	NF	25	40.8	36.0	19.4	24.5	46	12	3.8	26.4	G 3/4	122	10	
○	N29BGZ 32	32	23	48.3	44.0	24.6	28.5	55	14	4.5	33.2	G 1	205	10	

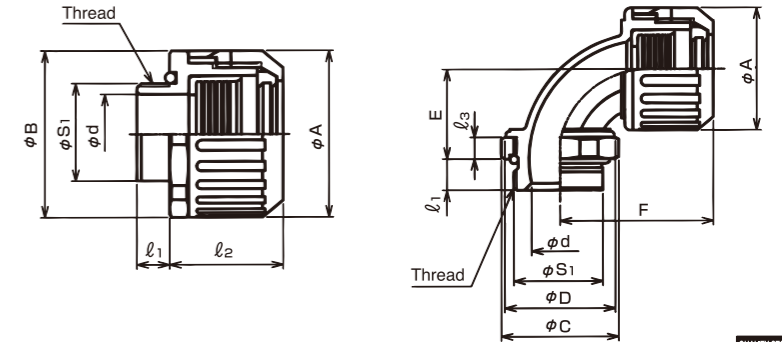
N2 SERIES METALLIC FITTING FOR ELECTRIC DEVICES

SURFACE FINISH	SURFACE FINISH	FEATURE	FEATURE	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP67	Oil resistance	Hold up to vibration	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

FOR ELECTRIC DEVICES

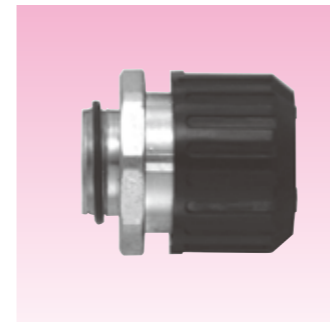


- Metallic connectors
- With Non-metallic box nut (Box nut Color: Black)
- Designed for electric devices
- Style Availability: Straight / 90 degree angle-style
- Tensile Strength Classification:
Between SANFLEKI ROBO and fitting: 250N (light by JIS)
- ※ (in the column of "Connectable SANFLEKI ROBO" in the chart) denotes NS, NF, NP



QUALITY STANDARD
JIS C8461-23

STRAIGHT STYLE



CONNECTED TO INTERNAL THREAD - METRIC THREAD

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB	φd	l1	l2	Thread JIS C 8463		Weight (g/pc)	Qty / Package
									φS1	Nominal size		
○	N20MZ 25	※ 25	19	40.8	40.8	19.7	8	28	24.9	M25×1.5	73	10

CONNECTED TO INTERNAL THREAD - Pg THREAD

Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φB	φd	l1	l2	Thread DIN 40 430		Weight (g/pc)	Qty / Package
									φS1	Nominal size		
○	N20PgZ 16 11	※ 16	10	29.9	29.9	11.4	6	24	18.6	Pg11	38	20

90 DEGREE ANGLE STYLE



CONNECTED TO INTERNAL THREAD - Pg THREAD

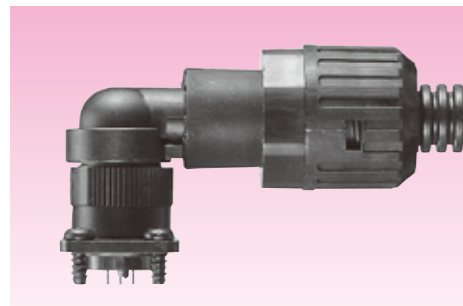
Delivery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φA	φC φD	φd	E	F	l1	l2	l3	Thread JIS B 0202		Weight (g/pc)	Qty / Package
												φS1	Nominal size		
○	N29OPgZ 16 16	※ 16	10	29.9	28.7	11.4	21.9	38	7.7	5.3	22.5	Pg16	65	10	

N2 SERIES COUPLING FOR SERVO MOTOR (ai, βi - Fanuc Corporation)

FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

TYPE N2KY※FN3 - FOR JAE PRODUCT

MAIN MATERIAL
PA66

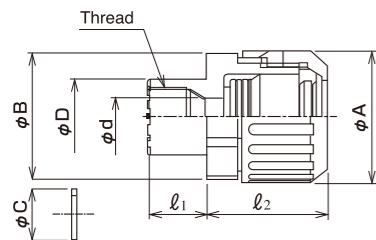


- Couplings
- Designed to connect SANFLEKI ROBO to connectors of Japan Aviation Electronics Industry, Limited
- Refer to an installation instruction
- ※ (in the column of "Connectable connector" in the chart) denotes JN1 SERIES, JN2 SERIES (Japan Aviation Electronics Industry, Limited)
- Available on request :
Reinforcement (stay) SFP4437 ~ 441: designed for connectors of Japan Aviation Electronics Industry, Limited
- Tensile Strength Classification:
Between SANFLEKI ROBO size 16 and Coupling: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

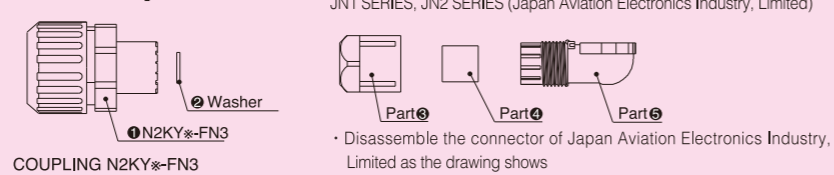
QUALITY STANDARD
JIS C8461-23

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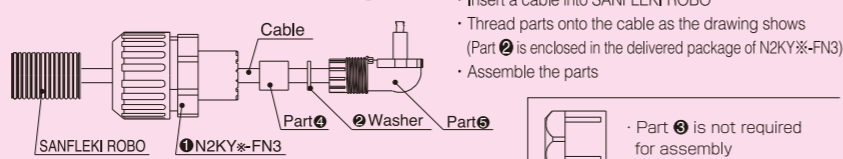
Delivery	Item number	Connectable		Cable max outside diameter to be inserted	φA	φB	φd	φC	φD	l ₁	l ₂	Weight (g/pc)	Qty / Package
		SANFLEKI ROBO	Connector										
○	N2KY12-FN3	NS 12	※	7.5	25.5	8.1	10.3	17.0	13.6	27	10	20	
○	N2KY16-FN3	NF 16	※	8.0	29.9	8.4	10.3	17.0	13.6	27	13	20	



[PREPARATION]



[TO BE COMBINED WITH N2KY※FN3]



- Insert a cable into SANFLEKI ROBO
- Thread parts onto the cable as the drawing shows (Part ② is enclosed in the delivered package of N2KY※FN3)
- Assemble the parts
- Part ③ is not required for assembly

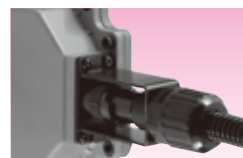
REINFORCEMENT (STAY) TYPE SFP4※- FOR JAE PRODUCT

MATERIAL	SURFACE FINISH	COLOR
Steel	Electroplated zinc	Black

ENVIRONMENT
RoHS

Reinforcement (stay) SFP4437 ~ 441
 • designed for connectors of Japan Aviation Electronics Industry, Limited

Sall be used with Couplings N2KY※FN3, KMKYP12-FN5
 (Sankei Manufacturing Co.,Ltd.)



SFP4 437



SFP4 438



SFP4 439

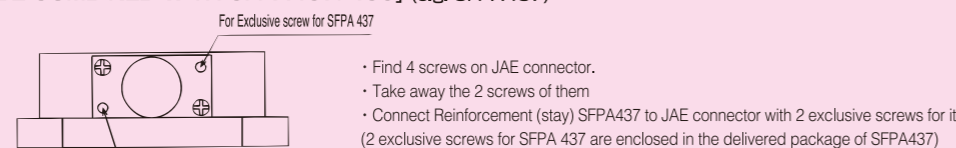


SFP4 440



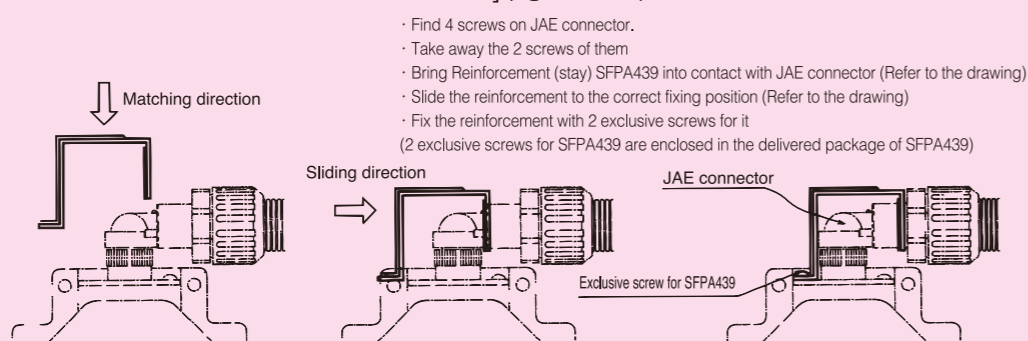
SFP4 441

[TO BE COMBINED WITH SFP4437/438] (e.g. SFP4437)



- Find 4 screws on JAE connector.
- Take away the 2 screws of them
- Connect Reinforcement (stay) SFP4437 to JAE connector with 2 exclusive screws for it (2 exclusive screws for SFP4 437 are enclosed in the delivered package of SFP4437)

[TO BE COMBINED WITH SFP4439/440/441] (e.g. SFP4439)



- Find 4 screws on JAE connector.
- Take away the 2 screws of them
- Bring Reinforcement (stay) SFP4439 into contact with JAE connector (Refer to the drawing)
- Slide the reinforcement to the correct fixing position (Refer to the drawing)
- Fix the reinforcement with 2 exclusive screws for it (2 exclusive screws for SFP4439 are enclosed in the delivered package of SFP4439)

Delivery	Item number	Connectable Connector of JAE		Connectable Coupling of SANKEI Mfg.Co.,Ltd.	Weight (g/pc)	Qty / Package
		Nominal size	Type			
○	SFP4 437	JN1DS 10 SL 1,2	Straight-style	N2KY 12-FN3 16 KMKYP12-FN5	24	10
○	SFP4 438	JN1DS 04 FK 1,2	Straight-style		30	10
○	SFP4 439	JN1FS 10 SL 1,2	90 degree angle-style (A type)		19	10
○	SFP4 440	JN1FS 10 SL 1,2	90 degree angle-style (B type)		14	10
○	SFP4 441	JN1FS 04 FK 1,2	90 degree angle-style		19	10

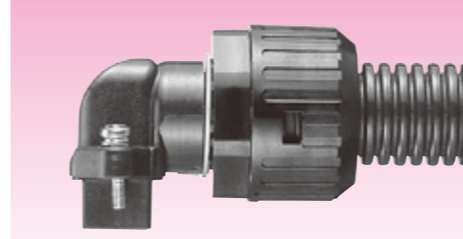
Contact us for more information of connectable JN1 SERIES (JAE) / JN2 SERIES (JAE)

N2 SERIES FITTING FOR SERVO MOTOR (ai, βi - Fanuc Corporation)

FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

TYPE N2BM20FN4 - FOR TYCO ELECTRONICS AMP K.K PRODUCT

MAIN MATERIAL
PA66

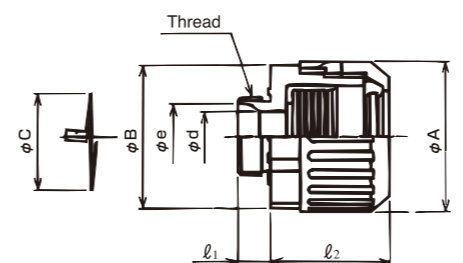


- Connectors
- Designed to connect SANFLEKI ROBO to connectors of Tyco Electronics AMP K.K
- Refer to an installation instruction
- ※ (in the column of "Connectable connector" in the chart) denotes 1473393-1, 1473393-2 (Tyco Electronics AMP K.K)
- Tensile Strength Classification:
Between SANFLEKI ROBO and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

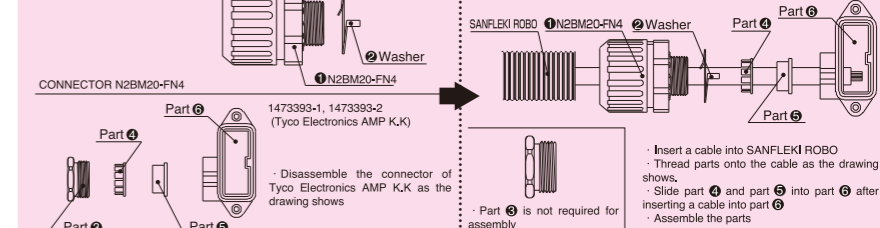
QUALITY STANDARD
JIS C8461-23

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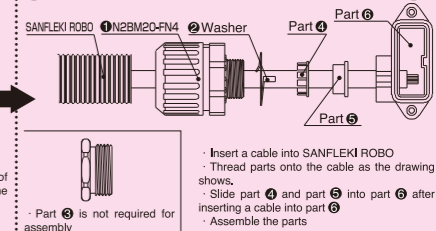
Delivery	Item number	Connectable		Cable max outside diameter to be inserted	φA	φB	φC	φd	φe	l ₁	l ₂	Weight (g/pc)	Qty / Package
		SANFLEKI ROBO	Connector										
○	N2BM20-FN4	NS 20 NF NP	※	11.4	34.4	22.2	11.5	15.0	8.5	28	17	20	



[PREPARATION]



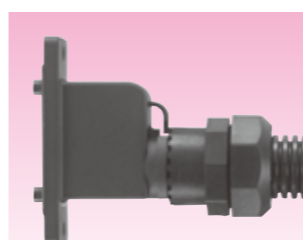
[TO BE COMBINED WITH N2BM20-FN4]



N2 SERIES FITTING FOR SERVO MOTOR (α - Fanuc Corporation)

MAIN MATERIAL	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	IP65	Oil resistance	RoHS		UL94V0	Lowest -20°C ~ Highest 100°C

FOR HIROSE ELECTRIC CO.,LTD. PRODUCT



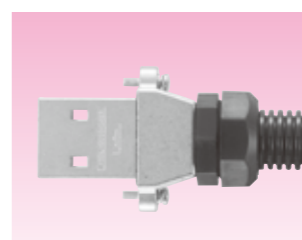
- Couplings
- Designed to connect SANFLEKI ROBO to connectors of Hirose Electric Co.,Ltd.
- ※1 (in the column of "Connectable connector" in the chart) denotes HDAW-15CVR, HDAW-15CV (Hirose Electric Co.,Ltd.)
- Tensile Strength Classification:
Between SANFLEKI ROBO and Coupling: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

QUALITY STANDARD
JIS C8461-23

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Delivery	Item number	SANFLEKI ROBO	Connector	Weight (g/pc)	Qty / Package
○	NKM20SH	NS 20 NF NP	※1	15	20

FOR TYCO ELECTRONICS AMP K.K PRODUCT



- Connectors
- Designed to connect SANFLEKI ROBO to connectors of Tyco Electronics AMP K.K
- ※2 (in the column of "Connectable connector" in the chart) denotes 176346-4 (Tyco Electronics AMP K.K)
- Tensile Strength Classification:
Between SANFLEKI ROBO and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

QUALITY STANDARD
JIS C8461-23

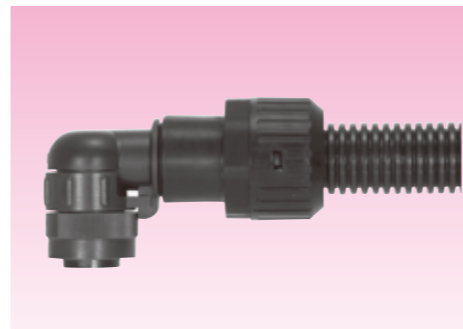
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Delivery	Item number	SANFLEKI ROBO	Connector	Weight (g/pc)	Qty / Package
○	NBM20SA	NS 20	※2	12	20
○	NBM25SA	NF 25		18	20

N2 SERIES COUPLING FOR JN1※W/JN2※W (Japan Aviation Electronics Industry Limited)

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

TYPE N2KY20-SP491 - FOR JAE PRODUCT

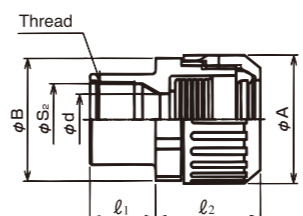


- Couplings
- Designed to connect SANFLEKI ROBO to connectors of Japan Aviation Electronics Industry, Limited
- Refer to an installation instruction
- ※ (in the column of "Connectable connector" in the chart) denotes JN1※W/JN2※W (Japan Aviation Electronics Industry, Limited)
- Tensile Strength Classification:
Between SANFLEKI ROBO and Coupling: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

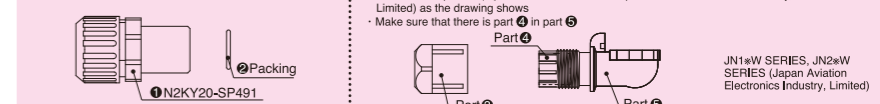
QUALITY STANDARD
JIS C8461-23

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Delivery	Item number	Connectable		Cable max outside diameter to be inserted	φA	φB	φd	l ₁	l ₂	φS ₂	Nominal size	Weight (g/pc)	Qty / Package
		SANFLEKI ROBO	Connector										
○	N2KY20-SP491	20	※	φ 12	34.4	34.4	13.6	17.7	27.5	19.2	M20×2.0 (double-thread screw)	10	20



PREPARATION



[TO BE COMBINED WITH N2KY20-SP491]



- Put part ② onto the assembly position (the groove on the flange of part ①) (Part ② is enclosed in the delivered package of N2KY20-SP491)
- Insert a cable into SANFLEKI ROBO
- Thread parts onto the cable as the drawing shows.
- Assemble the parts
- Part ③ is not required for assembly

N2 SERIES FITTING FOR CM10 (DDK Ltd.)

MAIN MATERIAL	SURFACE FINISH	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	ZDC2	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~Highest 90°C

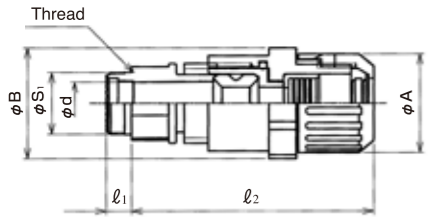
TYPE N2HOM※※-MD25 FOR DDK LTD. PRODUCT



- Straight connectors
- Designed to connect SANFLEKI ROBO to connectors of DDK Ltd.
- ※ (in the column of "Connectable connector" in the chart) denotes CM10-SP (DDK Ltd.). Note: Backshell shall be disconnected when connecting
- CM10-SP-CV (DDK Ltd.) can be connected
- Refer to an installation instruction
- Tensile Strength Classification:
 - Between SANFLEKI ROBO size 16 and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart

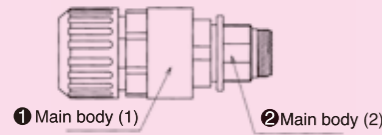
QUALITY STANDARD
JIS C8461-23

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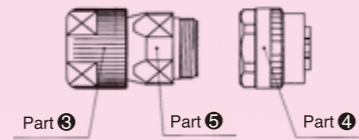


Deliv-ery	Item number	Connectable		Cable outside diameter to be inserted		φ A	φ B	φ d	l ₁	l ₂	Thread JIS B 0207 φ S 1	Nominal size	Weight (g/pc)	Qty / Package
		SANFLEKI ROBO	Connector	Max.	Min.									
③	N2HOM1207-MD25	12	※	7	4	25.5	29.9	10.8	6.5	63	15.9	M16X1		10
③	N2HOM1608-MD25	16	※	8	4	29.9	29.9	11.3	6.5	63	15.9	M16X1		10
③	N2HOM1611-MD25	16	※	11	8	29.9	29.9	11.3	6.5	63	15.9	M16X1		10
③	N2HOM2511-MD25	25		11	8	40.8	40.8	11.3	6.5	68	15.9	M16X1		10

PREPARATION CONNECTOR N2HOM※※-MD25



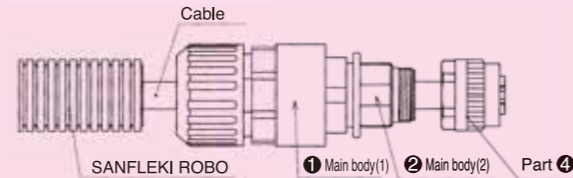
• Disassemble part ④ and part ⑤ (parts of connectors of DDK Ltd.) as the drawing shows



CM10-SP SERIES (DDK Ltd)

TO BE COMBINED WITH N2HOM※※-MD25

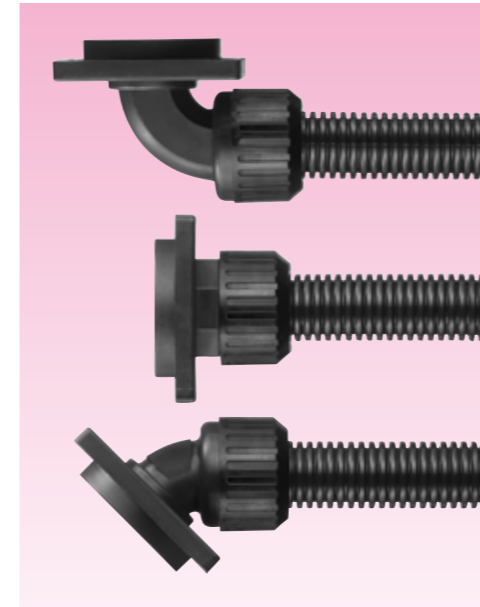
- Insert a cable into SANFLEKI ROBO
- Thread parts onto the cable as the drawing shows.
- Connect the cable to part ④
- Tighten up part ② on part ④ with 5N · m
- Tighten up part ① on part ② with a tool
- Connect SANFLEKI ROBO to N2HOM※※-MD25
- Part ③ / Part ⑤ are not required for assembly



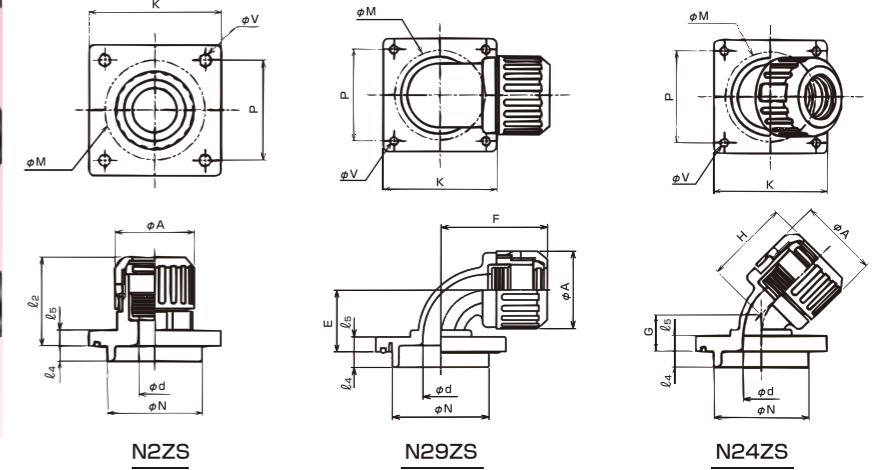
N2 SERIES FITTING WITH FLANGE

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~Highest 90°C

FLANGE TYPE



- Straight connectors with Flange
- Designed for knockout of wiring boxes
- Suitable for larger knockout size
- Tensile Strength Classification:
 - Between SANFLEKI ROBO and fitting: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart



QUALITY STANDARD
JIS C8461-23

STRAIGHT STYLE



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φ A	φ d	K	l ₂	l ₄	l ₅	φ M knockout hole dia.	φ N	P	φ V	Weight (g/pc)	Qty / Package	
○	N2ZS 16 50	16	10	29.9	11.4	50	33	6	6	38	37	38	4.5	31	5	
○	N2ZS 20 54	20	14	34.4	15.1	54	34	6	6	42	41	42	4.5	37	5	
○	N2ZS 25 62	NS	25	19	40.8	19.8	62	38	6	6	50	49	50	4.5	50	5
○	N2ZS 32 68	NP	32	25	48.3	26.1	68	38	6	6	55	54	56	4.5	62	2
○	N2ZS 40 72	NF	40	33	57.3	33.7	72	44	6	8	57	56	58	5.0	86	2
○	N2ZS 50 80		50	42	67.7	43.2	80	45	6	8	65	64	66	5.0	103	1
⑤	N2ZS 63 95		63	55	80.9	55.6	95	49	6	8	78	77	80	5.0	124	1

90 DEGREE ANGLE STYLE



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φ A	φ d	E	F	K	l ₄	l ₅	φ M knockout hole dia.	φ N	P	φ V	Weight (g/pc)	Qty / Package	
○	N29ZS 16 50	16	10	29.9	11.4	24	41	50	6	6	38	37	38	4.5	33	5	
○	N29ZS 20 54	20	14	34.4	15.1	26	45	54	6	6	42	41	42	4.5	41	5	
○	N29ZS 25 62	NS	25	19	40.8	19.8	28	51	6	6	42	41	42	4.5	60	5	
○	N29ZS 32 68	NP	32	25	48.3	26.1	32	54	6	6	55	54	56	4.5	71	2	
○	N29ZS 40 72	NF	40	33	57.3	33.7	39	62	72	6	8	57	56	58	5.0	100	2
○	N29ZS 50 80		50	42	67.7	43.0	45	71	80	6	8	65	64	66	5.0	132	1
⑤	N29ZS 63 95		63	54	80.9	55.1	52	83	95	6	8	78	77	80	5.0	152	1

45 DEGREE ANGLE STYLE



[BLACK]

Deliv-ery	Item number	Connectable SANFLEKI ROBO	Cable max outside diameter to be inserted	φ A	φ d	G	H	K	l ₄	l ₅	φ M knockout hole dia.	φ N	P	φ V	Weight (g/pc)	Qty / Package	
○	N24ZS 16 50	16	10	29.9	11.4	14	31	50	6	6	38	37	38	4.5	32	5	
⑤	N24ZS 20 54	20	14	34.4	15.1	15	33	54	6	6	42	41	42	4.5	39	5	
○	N24ZS 25 62	NS	25	19	40.8	19.8	16	39	62	6	6	50	49	50	4.5	54	5
○	N24ZS 32 68	NP	32	25	48.3	26.1	18	40	68	6	6	55	54	56	4.5	65	2
○	N24ZS 40 72	NF	40	33	57.3	33.7	22	45	72	6	8	57	56	58	5.0	92	2
⑤	N24ZS 50 80		50	42	67.7	43.0	24	49	80	6	8	65	64	66	5.0	112	1
⑤	N24ZS 63 95		63	54	80.9	55.1	27	57	95	6	8	78	77	80	5.0	130	1

QUALITY STANDARD
JIS C8461-23

QUALITY STANDARD
JIS C8461-23

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JIS C8461-23

N2 SERIES COUPLING FOR MS CONNECTOR

MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

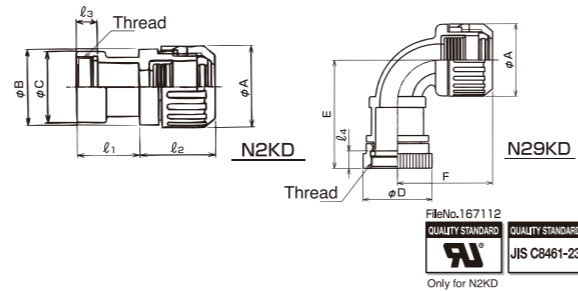
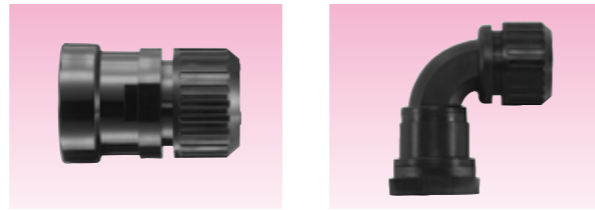
Only for N2HKD

FOR MS CONNECTOR (No backshell type)



- Combination couplings
- Designed for MS connector (No backshell type)
- Style Availability: Straight / 90 degree angle-style
- Tensile Strength Classification:
 - Between SANFLEKI ROBO size 16 ~ 63 and Coupling: 250N (light by JIS)
- Connectable SANFLEKI ROBO: Refer to the chart
- Must be fully tightened on MS connector with a tool (Recommended tool: SUPERTOOL MFT68A). General tightening torque is as indicated in the chart

Shell size	Tightening torque (N·m)	
	N2KD	N29KD
10~14	0.8~1.0	0.8~1.0
16~24	2.0~4.0	4.0~6.0
28~36	5.0~7.0	7.0~10.0



[BLACK / LIGHT GRAY]

Delivery				Item number		Connectable SANFLEKI ROBO	φ A φ B	φ C	φ D	E	F	l ₁	l ₂	l ₃	l ₄	Connectable MS connector				Weight (g/pc)	
N2KD		N29KD		Black	Light gray											Shell size	Thread ASME B1.1	N2KD	N29KD	Weight (g/pc)	
Black	Light gray	Black	Light gray																	N2KD	N29KD
3	3	5	5	12 10	12 10 LG	12	29.9	18.0	21.0	44	39	21	27	7.0	7.5	10SL	9/16- 24UNEF-2B	9	14	7	
3	3	5	5	12 12	12 12 LG											11/16-24UNEF-2B	10	15			
3	3	5	5	12 14	12 14 LG											14S	3/4- 20UNEF-2B	11	16		
3	3	5	5	12 16	12 16 LG	16	25.5	26.0	29.0	46	41	22.5	27	7.5	7.5	16/16S	7/8- 20UNEF-2B	11	17	9	
3	3	5	5	16 10	16 10 LG											10SL	9/16- 24UNEF-2B	11	17		
3	3	5	5	16 12	16 12 LG											12S	11/16-24UNEF-2B	33	19		
3	3	5	5	16 14	16 14 LG	16	29.9	23.8	26.8	48	41	27	27	7.0	7.5	14S	3/4- 20UNEF-2B	13	20	10	
3	3	5	5	16 16	16 16 LG											16/16S	7/8- 20UNEF-2B	13	19		
3	3	5	5	16 18	16 18 LG											18	1- 20UNEF-2B	15	23		
3	3	5	5	16 20	16 20 LG	16	32.0	33.5	36.5	51	41	22.5	27	7.5	7.5	20	1-1/8- 18UNEF-2B	21	25	10	
3	3	5	5	16 22	16 22 LG											22	1-1/4- 18UNEF-2B	23	28		
3	3	5	5	20 14	20 14 LG											14S	3/4- 20UNEF-2B	16	25		
3	3	5	5	20 16	20 16 LG	20	34.4	26.0	29.0	50	45	22.5	28	7.5	7.5	16/16S	7/8- 20UNEF-2B	16	26	11	
3	3	5	5	20 18	20 18 LG											18	1- 20UNEF-2B	18	27		
3	3	5	5	20 20	20 20 LG											20	1-1/8- 18UNEF-2B	20	30		
3	3	5	5	N2KD 20 22	N29KD 20 22 LG	20	35.1	37.0	40.0	54	51	30	32	10.0	10.0	22	1-1/4- 18UNEF-2B	23	37	11	
3	3	5	5	N2KD 20 24	N29KD 20 24 LG											24	1-3/8- 18UNEF-2B	30	37		
3	3	5	5	25 18	25 18 LG											18	1- 20UNEF-2B	24	36		
3	3	5	5	25 20	25 20 LG	25	40.8	33.5	36.5	55	51	32	32	7.5	7.5	20	1-1/8- 18UNEF-2B	26	39	12	
3	3	5	5	25 22	25 22 LG											22	1-1/4- 18UNEF-2B	28	40		
3	3	5	5	25 24	25 24 LG											24	1-3/8- 18UNEF-2B	31	48		
3	3	5	5	25 28	25 28 LG	25	41.2	46.9	49.9	60	51	30	32	10.0	10.0	28	1-5/8- 18UNEF-2B	36	50	13	
3	3	5	5	25 32	25 32 LG											32	1-7/8- 16UN-2B	45	58		
3	3	5	5	32 20	32 20 LG											20	1-1/8- 18UNEF-2B	38	52		
3	3	5	5	32 22	32 22 LG	32	48.3	37.0	40.0	60	54	32	32	7.5	7.5	22	1-1/4- 18UNEF-2B	40	54	14	
3	3	5	5	32 24	32 24 LG											24	1-3/8- 18UNEF-2B	41	57		
3	3	5	5	32 28	32 28 LG											28	1-5/8- 18UNEF-2B	43	66		
3	3	5	5	32 32	32 32 LG	32	53.4	53.3	56.3	69	54	36	36	11.0	12.0	32	1-7/8- 16UN-2B	51	67	15	
3	3	5	5	32 36	32 36 LG											36	2-1/8- 16UN-2B	57	77		
3	3	5	5	40 24	40 24 LG											24	1-3/8- 18UNEF-2B	44	88		
3	3	5	5	40 28	40 28 LG	40	57.3	46.9	49.9	69	62	36	36	10.0	10.0	28	1-5/8- 18UNEF-2B	46	89	16	
3	3	5	5	40 32	40 32 LG											32	1-7/8- 16UN-2B	48	94		
3	3	5	5	40 36	40 36 LG											36	2-1/8- 16UN-2B	50	100		

MOQ: Check with our Sales dept.

N2 SERIES COUPLING FOR MS CONNECTOR

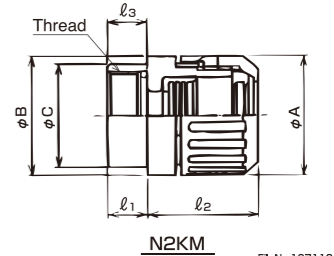
MAIN MATERIAL	FEATURE	FEATURE	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA66	IP67	Oil resistance	Hold up to vibration	HALOGEN FREE	RoHS	UL94V2	Lowest -20°C ~ Highest 90°C

FOR MS CONNECTOR (Backshell assembled type)



- Straight combination couplings
- Designed for MS connector (Backshell assembled type)
- Tensile Strength Classification:
 - Between SANFLEKI ROBO size 16 ~ 63 and Coupling: 250N (light by JIS)
- Note: Non-water resistance of the connection between N2KM and DDK Ltd. CE05 SERIES. Contact us should water resistance be required
- Connectable SANFLEKI ROBO: Refer to the chart
- Must be fully tightened on MS connector with a tool (Recommended tool: SUPERTOOL MFT68A). General tightening torque is as indicated in the chart

Shell size	Tightening torque (N·m)	
	N2KM	
10,14	0.8~1.0	
16~24	2.0~4.0	
32,36	5.0~7.0	



FileNo.167112
QUALITY STANDARD QUALITY STANDARD
JIS C8461-23

[BLACK / LIGHT GRAY]

Delivery		Item number		Connectable SANFLEKI ROBO	φ A φ B	φ C	l ₁	l ₂	l ₃	Connectable MS connector		Weight (g/pc)							
Black	Light gray	Black	Light gray							Shell size	Thread ASME B1.1								
3	3	12 10	12 10 LG										12	29.9	19.5	9.5	27	9.5	10SL/12S
3	3	12 14	12 14 LG	14S	3/4- 20UNEF-2B	9													
3	3	12 16	12 16 LG	16/16S	7/8- 20UNEF-2B		9												
3	3	16 10	16 10 LG	16	29.9			19.5	9.5	27	9.5	10SL/12S	5/8- 24UNEF-2B	10					
3	3	16 14	16 14 LG			14S						3/4- 20UNEF-2B	10						
3	3	16 16	16 16 LG			16/16S	7/8- 20UNEF-2B					11							
3	3	16 18	16 18 LG	16	31.7	29.7	9.5	27	9.5	18	1- 20UNEF-2B			12					
3	3	16 20	16 20 LG							20/22	1-3/16- 18UNEF-2B		15						
3	3	20 14	20 14 LG							20	34.4	26.0			9.5	28	9.5	16/16S	7/8- 20UNEF-2B
3	3	20 16	20 16 LG	18	1- 20UNEF-2B	15													
3	3	20 18	20 18 LG	20	37.0		35.0	9.5	28	9.5	20/22	1-3/16- 18UNEF-2B	19						
3	3	20 20	20 20 LG	20	44.1		42.1				9.5	28		9.5	24/28	1-7/16- 18UNEF-2B	21		
3	3	20 24	20 24 LG	20	40.8	29.7	9.5								32	9.5		18	1- 20UNEF-2B
3	3	25 18	25 18 LG					25	44.1	42.1			9.5					32	9.5
3	3	25 20	25 20 LG					25	52.4	50.4	11.1	32		11.1			32		
3	3	25 22	25 22 LG	25	58.5	56.5	12.7	32	12.7	36					2- 18UNS-2B	40			
3	3	25 24	25 24 LG							32			48.3		35.0		9.5	32	9.5
3	3	25 28	25 28 LG							25	48.3	42.1	9.5	32	9.5				
3	3	25 32	25 32 LG	25	52.4	50.4	11.1	32	11.1							24/28			
3	3	32 20	32 20 LG													32	52.4	50.4	11.1
3	3	32 22	32 22 LG							32	58.5	56.5	12.7	32	12.7				
3	3	32 24	32 24 LG	32	58.5	56.5	12.7	32	12.7										
3	3	32 28	32 28 LG													32	57.3	42.1	11.1
3	3	32 32	32 32 LG							32	57.3	42.1	11.1	36	9.5				
3	3	32 36	32 36 LG	32	58.5	56.5	12.7	36	12.7										
3	3	40 24	40 24 LG													40	57.3	50.4	11.1
3	3	40 28	40 28 LG							40	67.7	56.5	12.7	37	12.7				
3	3	40 32	40 32 LG	40	67.7	56.5	12.7	37	12.7										
3	3	40 36	40 36 LG													40	67.7	56.5	12.7

MOQ: Check with our Sales dept.

EXTENSION ACCESSORY

Type RHU



- Extension accessory for N2KM
- Make it possible for wiring work more efficient
- Look at a page for SANPARTS for more information

MAIN MATERIAL	SURFACE FINISH	FEATURE	TEMPERATURE RANGE
Brass	Electroplated zinc	IP67	Lowest -50°C ~ Highest 150°C