

**tyco**

Electronics

TYCO ELECTRONICS CORPORATION  
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**AMP**





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*Electronics*


Flexible Cable Protection System  
Catalog 1307244 Revised 1-04

**AMP**



### Electronics

#### Product Facts

- For cables that require better protection
- Fittings that allow more reliable connections to be made
- Fittings that enhance their reliability under many extreme conditions of use in the manufacture of machinery and construction
- High quality complete systems which combine innovative technology with rapid ex-stock availability
- In conformity with the latest industry standards
- Recognized under the Component Program of Underwriters Laboratories Inc.  on applied products as marked.
- Certified by Canadian Standards Association on applied products as marked. 
- Certified by VDE on applied products as marked. 

#### Related Product Data

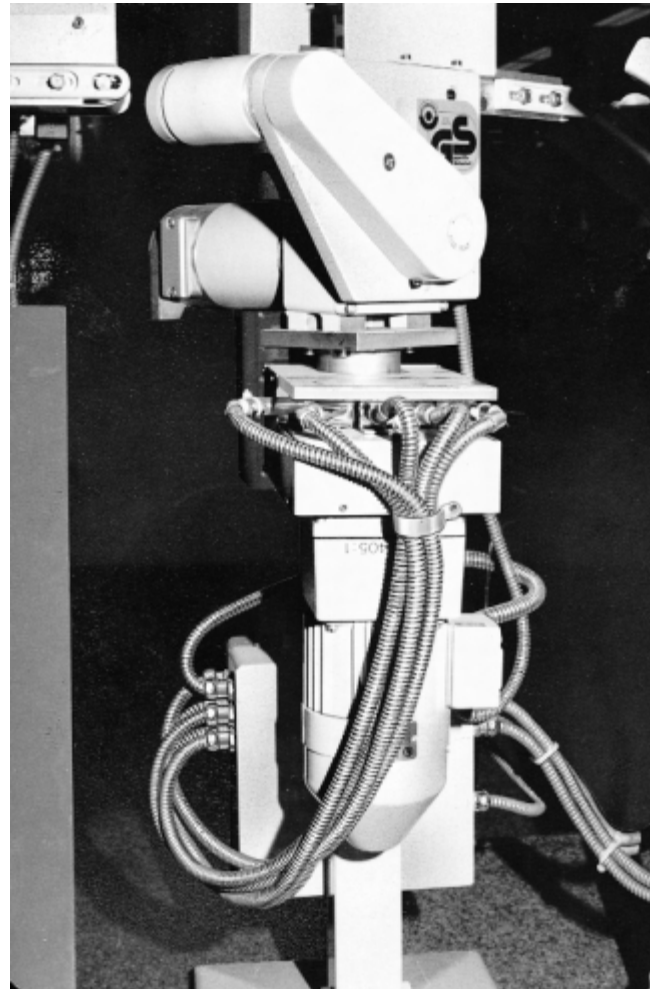
Catalog 124132  
Products for Insulating and Bundling

#### Product Specifications

108-1696 *Flexagraft*  
108-1696-1 *Rohrflex*  
108-1696-2 *Airflex*

#### Application Specifications

114-18274 *Flexagraft-AS, -PU-AS, -ME-ASF*  
114-18275 *Flexagraft-CU*  
114-18276 *Airflex-KUW-PU*  
114-18277 *Rohrflex-PA 6, Rohrflex-PA 12*



#### CPC/Flexa Selection Aid

CPC Shell Size	Flexa Connector Female	PA6 Flexa Tubing	Flexa Connector Male	Flexa R/A Connector Female	Flexa Counter Nut	Flat Sealing Washer
11	1-969807-2	969789-2	969803-2	969817-2	796260-2	796257-2
13	1-969809-3	969789-3	969803-3	969817-3	796260-3	796255-2
17	1-969811-4	969789-4	969803-4	969817-4	796260-5	796255-3
23	2-969813-5	969789-5	969803-5	969817-5	796260-6	796255-4

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**Types of FLEXA<sup>quick</sup>-System and Types of ROHR<sup>flex</sup>-Tubing**

**Types of FLEXA<sup>quick</sup> - System**

<b>* dash characterizes connector thread / flange</b>	P	— PG - thread
	M	— Metric thread
	F	— Flange connection
	N	— NPT - thread
	U	— UNEF - thread
	C	—CTG / gas - thread
	S	— plug-type connection
	1	— conically sealing
	2	— inner thread
	3	— inner thread and conically sealing
<b>(combinations possible)</b>	Z	— strain relief
	M	— metal housing
	C	— CSA - tubing dimension
	K	— plastic housing with metal thread
	E	— EMC-insert
	G	— Straight type
	W	— Elbow type
	Y	— Y - type connector
	E	— End cap
	S	— clamp
	D	— Cover for clamp
	V	— Connecting element
	H	— top hat rail clip
	F	— Flange connection
	<b>RQ</b>	— <b>ROHRFLEX<sup>quick</sup></b>

**Types of ROHR<sup>flex</sup>- tubing (combinations possible)**

<b>Execution:</b>	CSA	— CSA conformal
	CU	— with copper wire braiding
	D	— thick-walled
	G	— slitted
<b>Material:</b>	PA6	— Polyamide 6, V0 according UL 94
	PA6-V	— Polyamide 6, V2 according UL 94
	PA6-S	— Polyamide 6, HB according UL 94
	PA 12	— Polyamide 12
	PP	— Polypropylene
	PE	— Polyethylene
<b>Type of Hose:</b>	<b>ROHR<sup>flex</sup></b>	— Corrugated tubing

**Assembly Instructions FLEXAquick**

Please note the following in order to attain protective System IP 67 acc. to EN 60529/IEC 529

**Parting of protective System**

Cut the corrugated tubing ROHRflex-PA with a knife in the valley of a wave.

More than one wave should not be passed while cutting the tubing.

**Assembly**

Tubing and screw connection must be assembled to the cutting tubing side.

Push the connector into the tubing until it cannot snap-in any longer and the connector can only be turned with power.

The relieved corrugated tubing pushes the claws of the snap-in-sleeve into the valley of the wave, this means an exact closing of the connection.



Simply push in.

**Dismounting**

Press the ring of the snap-in-sleeve to the connector case, then pull the tubing out or the connector from the tubing.

The connection is ready for use again.



Quick disconnect without tools.  
Press ring to the housing and pull off.



**Corrugated Plastic Tubing, FLEXAquick**

**Performance Characteristics**

Corrugated all-plastic tubing, UL-File-No. E86359

**Construction**

Inside and outside corrugated all-plastic tubing.

**Material**

High-quality plastic (PA).

**Properties**

Air- and liquid-tight, oil resistant up to +80°C, benzene resistant, more resistant to acids and solvents, ozone resistant, free of silicon, cadmium and halogen, self extinguishing and flame retarding.

**V O according UL 94**

For favorable material properties of the polyamide, we recommend storage of **ROHRflex** tubings under the following conditions:  
Storing temperature: +20°C ±5°C  
Air humidity: 55 up to 75%

**Protective system**

IP 68 acc. EN 60529

**Temperature range**

From approx. -40°C up to approx. +115°C, temporarily withstands temperatures up to approx. +150°C

**Application**

Installation tubing for protective insulating electrical installations. Suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Delivery lengths**

25m and 50m depending on dimension, straightly measured.  
Also slitted deliverable.

**Comments**

UL recognized components "Yellow card" on inquiry.

**Related Product Data**

Application Tooling — Page 37

**ROHRflex-PA 6 (IP 68)**



Trade Size*** Tubing Outer-Ø	Dimension Inner-Ø x Outer-Ø mm Approx.	ROHRflex- PA 6 (Grey) Part No.	ROHRflex- PA 6 (Black) Part No.	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*	Ring Size in Ft.
<b>0.39</b> 10.0	6.5 x 10.0	969790-1	969789-1	13	0.018	50m	164'
<b>0.51</b> 13.0	10.0 x 13.0	969790-2**	969789-2**	20	0.025	50m	164'
<b>0.62</b> 15.8	12.0 x 15.8	969790-3**	969789-3**	35	0.037	50m	164'
<b>0.83</b> 21.2	16.5 x 21.2	969790-4**	969789-4**	45	0.056	50m	164'
<b>1.12</b> 28.5	23.0 x 28.5	969790-5**	969789-5**	55	0.090	50m	164'
<b>1.35</b> 34.5	29.0 x 34.5	969790-6**	969789-6**	65	0.126	25m	82'
<b>1.67</b> 42.5	36.0 x 42.5	969790-7	969789-7	90	0.187	25m	82'
<b>2.14</b> 54.5	48.0 x 54.4	969790-8	969789-8	100	0.225	25m	82'
<b>0.73</b> 18.5	14.3 x 18.2	969790-9	969789-9	40	0.050	50m	164'

\*20 Rings of specified length

\*\*GGVS certified

\*\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Notes:** 1. Certification from KEMA, affirming that **ROHRflex-PA**-corrugated hoses are suitable for wiring of machines that are exported to Canada.

According to DB-requirements DIN 5510 part 2.

London Underground laboratory (LUL) licensed.

ISSEP proved according to NFF 16101 and 16102.

2. For quantities less than minimums, contact Tyco Electronics.

**Corrugated Plastic Tubing, FLEXAquick (Continued)**

**Performance Characteristics**

Corrugated all-plastic tubing,  
UL-File-No. E86359/PA 6-S

**Construction**

Inside and outside corrugated all-plastic tubing.

**Material**

High-quality plastic (PA).

**Properties**

Air- and liquid-tight, oil resistant up to +80°C, benzene resistant, more resistant to acids and solvents, ozone resistant, free of silicon, cadmium and halogen, flame-retarding. **HB/V2 according UL 94.** For favorable material properties of the polyamide, we recommend storage of **ROHRflex** tubing under the following conditions: Storing temperature: +20°C ± 5°C Air humidity: 55 up to 75%

**Protective system**

IP 68 acc. EN 60529

**Temperature range**

From approx. -50°C up to approx. +115°C, temporarily withstands temperatures up to approx. +150°C

**Application**

Installation tubing for protective insulating electrical installations. Suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Delivery lengths**

25m and 50m depending on dimension, straightly measured.

**Comment**

UL recognized components "Yellow card" on inquiry.

**Related Product Data**

Application Tooling — Page 37

**ROHRflex-PA 6-S (IP 68)**



Trade Size** Tubing Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	ROHRflex- PA 6-S (Grey) Part No.	ROHRflex- PA 6-S (Black) Part No.	Bending Radius mm ± 10%	Weight kg/m ± 10%	Minimum Package Size*	Ring Size in Ft.
<b>0.39</b> 10.0	6.5 x 10.0	2-969791-1	969791-1	13	0.020	50m	164'
<b>0.51</b> 13.0	10.0 x 13.0	2-969791-2	969791-2	20	0.024	50m	164'
<b>0.62</b> 15.8	12.0 x 15.8	2-969791-3	969791-3	35	0.034	50m	164'
<b>0.83</b> 21.2	16.5 x 21.2	2-969791-4	969791-4	45	0.056	50m	164'
<b>1.12</b> 28.5	23.0 x 28.5	2-969791-5	969791-5	55	0.090	50m	164'
<b>1.35</b> 34.5	29.0 x 34.5	2-969791-6	969791-6	65	0.120	25m	82'
<b>1.67</b> 42.5	36.0 x 42.5	2-969791-7	969791-7	90	0.165	25m	82'
<b>2.14</b> 54.5	48.0 x 54.4	2-969791-8	969791-8	100	0.225	25m	82'
<b>0.73</b> 18.5	14.3 x 18.2	2-969791-9	969791-9	40	0.050	50m	164'

\*20 Rings of specified length.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



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**Corrugated Plastic Tubing, FLEXAquick (Continued)**

**Performance Characteristics**

Corrugated all-plastic tubing.

**Construction**

Inside and outside corrugated all-plastic tubing.

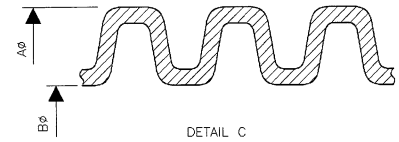
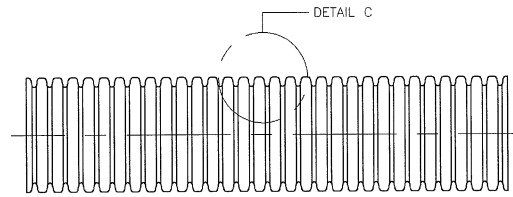
**Material**

High-quality plastic (PA).

**Delivery lengths**

25m and 50m depending on dimension, straightly measured.

**ROHRflex-PA 6-D**



Trade Size* Tubing Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	ROHRflex- PA 6-D (Grey) Part No.	ROHRflex- PA 6-D (Black) Part No.	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size
0.39 10.0	6.5 x 10.0	796790-1	2-796790-1	15	0.025	50m
0.51 13.0	9.5 x 13.0	796790-2	2-796790-2	25	0.035	50m
0.62 15.8	11.5 x 15.8	796790-3	2-796790-3	35	0.050	50m
0.73 18.5	13.8 x 18.2	796790-4	2-796790-4	40	0.050	50m
0.83 21.2	16.0 x 21.2	796790-5	2-796790-5	50	0.082	50m
1.12 28.5	22.0 x 28.5	796790-6	2-796790-6	60	0.115	50m
1.35 34.5	28.4 x 34.5	796790-7	2-796790-7	70	0.155	25m
1.67 42.5	35.5 x 42.5	796790-8	2-796790-8	100	0.212	25m
2.14 54.5	47.0 x 54.5	796790-9	2-796790-9	110	0.260	25m

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Performance Characteristics**

Corrugated all-plastic tubing.

**Construction**

Inside and outside corrugated all-plastic tubing.

**Material**

High-quality plastic (PA).

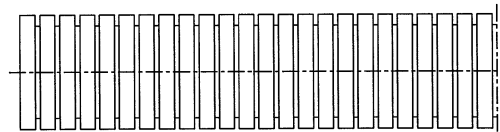
**Color**

Black

**Delivery lengths**

25m and 50m depending on dimension, straightly measured.

**ROHRflex-PA 6-CSA**



Trade Size* Tubing Outer-Ø AD	NPT	Dimension Inner-Ø x Outer-Ø mm Approx.	ROHRflex- PA 6-D Part No.	Bending Radius mm ±10%	Weight kg/m ±10%	Delivery Lengths In Rings
0.51 13.0	1/4"	9.5 x 13.0	796472-1	15	0.030	50m
0.62 15.8	5/16"	11.5 x 15.8	796472-2	25	0.050	50m
0.70 17.8	3/8"	12.9 x 17.8	796472-3	30	0.060	50m
0.86 21.8	1/2"	16.5 x 21.8	796472-4	40	0.090	50m
1.12 28.5	3/4"	22.0 x 28.5	796472-5	50	0.130	50m
1.35 34.4	1"	27.7 x 34.4	796472-6	60	0.160	25m
1.67 42.5	1 1/4"	35.5 x 42.5	796472-7	90	0.187	25m

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubings, FLEXAquick (Continued)**

**Performance Characteristics**

Corrugated all-plastic tubing, highly flexible.

**Construction**

Inside and outside corrugated all-plastic tubing.

**Material**

High-quality plastic (PA).

**Properties**

High alternate bending strength, improved insulation properties due to lower absorption of humidity, air- and liquid-tight, oil and benzine resistant, ozone resistant, free of silicon, cadmium and halogen, self-extinguishing and flame retarding. **V2 (V0) according UL 94**. For favorable material properties of the polyamide, we recommend storage of **ROHRflex** tubings under the following conditions:  
 Storing temperature: +20°C ± 5°C  
 Air humidity: 55 up to 75%

**Protective system**

IP 68 acc. EN 60529

**Temperature range**

From approx. -50°C up to approx. +100°C, temporarily withstands temperatures up to approx. +150°C

**Application**

Installation tubing for protective insulating electrical installations. Suited acc. to the application rules of DIN EN 60204 in the machine and plant construction, especially for frequent reversed bending, i.e. robots.

**Color**

Grey and black

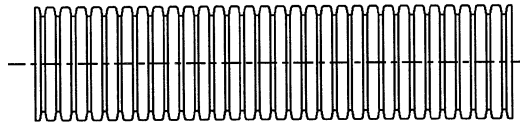
**Delivery lengths**

25m and 50m depending on dimension, straightly measured. Also slitted deliverable.

**Related Product Data**

Application Tooling — Page 37

**ROHRflex-Multi-PA 6**



Trade Size Tubing Outer-Ø AD	Dimension Inner-ØA x Outer-ØB mm Approx.	ROHRflex-Multi-PA 6 (Grey) Part No.	ROHRflex-Multi-PA 6 (Black) Part No.	Bending Radius mm	Approx. Weight kg/m	Minimum Package Size
2.76 70.0	66.5 x 79.2	2-796361-1	796361-1	170	0.69	10m
3.74 95.0	91.0 x 106.0	2-796361-2	796361-2	225	0.93	10m

**ROHRflex-PA 12 (IP 68)**



Trade Size** Tubing Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	ROHRflex-PA 12 (Grey) Part No.	ROHRflex-PA 12 (Black) Part No.	Bending Radius mm ± 10%	Weight kg/m ± 10%	Minimum Package Size*	Size in Ft.
0.39 10.0	6.5 x 10.0	969792-1	969793-1	13	0.020	50m	164'
0.51 13.0	10.0 x 13.0	969792-2	969793-2	15	0.024	50m	164'
0.62 15.8	12.0 x 15.8	969792-3	969793-3	22	0.034	50m	164'
0.83 21.2	16.5 x 21.2	969792-4	969793-4	27	0.056	50m	164'
1.12 28.5	23.0 x 28.5	969792-5	969793-5	45	0.090	50m	164'
1.35 34.5	29.0 x 34.5	969792-6	969793-6	50	0.120	25m	82'
1.67 42.5	36.0 x 42.5	969792-7	969793-7	80	0.165	25m	82'
2.14 54.5	48.0 x 54.4	969792-8	969793-8	100	0.225	25m	82'
0.73 18.5	14.3 x 18.2	969792-9	969793-9	27	0.050	50m	164'

\*20 Rings of specified length.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections**

**Performance Characteristics**

One-piece plastic quick screw connection with PG-outer thread acc. to DIN 40430 for corrugated tubings as well as Reducing or Extending.

**Construction**

Screw connection case with hexagon wrench surface and fixed PG connecting thread DIN 40430 as well as an integrated snap-in sleeve and sealing.

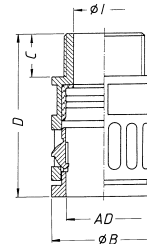
**Material**

High-quality, impact resistant plastic material (PA)  
Sealing: Santoprene®

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions. Smallest inner-Ø I ≥ tubing inside diameter.

**RQG-P (IP 68)**



**Protective system**

IP 68 acc. EN 60529

**Temperature range**

From approx. -30°C up to approx. +100°C

**Application**

For expert assembly, as protective insulating screw connection suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Suitable for tubing types**

Corrugated tubing, type: **ROHRflex**.

Trade Size** Tubing Outer-Ø AD	RQG-P (Grey) Part Number	RQG-P (Black) Part Number	Thread DIN 40430 PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Wrench size across flats SW	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	969804-1	969803-1	7	7.0	17.0	10.0	32.5	15.5	50	0.35
0.39 10.0	969832-1	969831-1	9	7.0	18.5	10.0	32.5	15.5	50	0.35
0.39 10.0	1-969832-1	1-969831-1	11	7.0	21.0	10.0	32.5	15.5	50	0.40
0.39 10.0	3-969832-1	3-969831-1	13.5	7.0	23.0	10.0	32.5	15.5	25	0.45
0.51 13.0	969834-2	969833-2	7	8.0	20.0	10.0	35.0	18.0	50	0.45
0.51 13.0	969804-2*	969803-2*	9	10.0	20.0	10.0	35.0	18.0	50	0.45
0.51 13.0	2-969832-2	2-969831-2	11	10.0	21.0	10.0	35.0	18.0	50	0.50
0.51 13.0	4-969832-2	4-969831-2	13.5	10.0	23.0	10.0	35.0	18.0	25	0.50
0.62 15.8	969804-3*	969803-3*	11	12.5	23.0	10.0	37.0	21.0	50	0.60
0.62 15.8	5-969832-3	5-969831-3	13.5	12.5	23.0	10.0	37.0	21.0	25	0.60
0.83 21.2	969834-4	969833-4	13.5	15.4	29.5	12.0	43.5	27.0	10	0.90
0.83 21.2	969804-4*	969803-4*	16	17.0	29.5	12.0	43.5	27.0	50	1.00
1.12 28.5	969834-5	969833-5	16	17.0	37.0	12.0	46.0	34.0	10	1.50
1.12 28.5	969804-5*	969803-5*	21	23.5	37.0	12.0	46.0	34.0	25	1.50
1.35 34.5	969804-6*	969803-6*	29	30.5	44.0	12.0	48.0	40.0	25	2.20
1.67 42.5	969804-7	969803-7	36	36.5	51.5	11.5	50.5	48.0	25	3.10
2.14 54.5	969804-8	969803-8	48	48.5	65.5	14.5	54.0	59.0	10	4.50

\*GGVS certified

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

One-piece plastic quick screw connection with metric ISO thread acc. EN 60423 for corrugated tubings.

**Construction**

Screw connection case with hexagon wrench surface and fixed PG connecting thread DIN 40430 as well as an integrated snap-in sleeve and sealing.

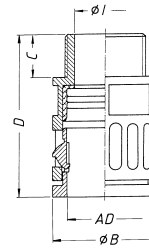
**Material**

High-quality, impact resistant plastic material (PA)  
Sealing: Santoprene®

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions. Smallest inner-Ø I ≥ tubing inside diameter.

**RQG-M (IP 67)**



**Protective system**

IP 67 acc. EN 60529

**Temperature range**

From approx. -30°C up to approx. +100°C

**Application**

For expert assembly, as protective insulating screw connection suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Suitable for tubing types**

Corrugated tubing, type: **ROHRflex** — Pages 6-9

Trade Size** Tubing Outer-Ø AD	RQG-M (Grey) Part Number	RQG-M (Black) Part Number	Thread EN 60430 Metric	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Wrench size across flats	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	2-796283-1	796283-1	10 x 1.0	6.5	17.0	12	34.5	15.5	50	0.40
0.51 13.0	2-796283-2*	796283-2*	12 x 1.5	8.0	20.0	12	37.0	18.0	50	0.45
0.51 13.0	2-796283-3	796283-3*	16 x 1.5	10.0	20.0	12	37.0	18.0	50	0.50
0.62 15.8	2-796283-4*	796283-4*	16 x 1.5	12.0	23.0	12	39.0	21.0	50	0.60
0.62 15.8	2-796283-5	796283-5*	20 x 1.5	12.0	23.0	13	39.0	21.0	50	0.70
0.83 21.2	2-796283-6*	796283-6*	20 x 1.5	16.0	29.5	13	44.5	27.0	50	1.00
1.12 28.5	2-796283-7*	796283-7*	25 x 1.5	20.5	37.0	13	47.0	34.0	25	1.40
1.35 34.5	2-796283-8*	796283-8*	32 x 1.5	27.5	44.0	15	51.0	40.0	25	2.20
1.67 42.5	2-796283-9	796283-9	40 x 1.5	35.0	51.5	15	53.5	48.0	25	2.80
2.14 54.5	3-796283-0	1-796283-0	50 x 1.5	45.0	65.5	16	55.0	59.0	10	3.80
0.39 10.0	—	1-796283-1	12 x 1.0	6.5	17.0	12	34.5	15.5	50	0.40

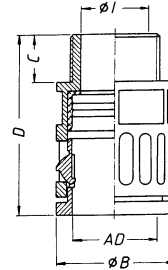
\*GGVS certified

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Corrugated Plastic Tubing Connections (Continued)

Plastic quick screw connection with NPT-thread.

RQG-N  
(IP 67)



Trade Size** Tubing Outer-Ø AD	RQG-N (Black) Part Number	Thread NPT	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Wrench size across flats	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	796253-1	1/4	7.0	17.0	11.5	34.0	15.5	50	0.35
0.51 13.0	796253-2*	1/4	10.0	20.0	12	37.0	18.0	50	0.40
0.51 13.0	796253-3*	3/8	10.0	20.0	12	37.0	18.0	50	0.45
0.62 15.8	796253-4*	3/8	12.5	23.0	12	39.0	21.0	50	0.60
0.62 15.8	796253-5*	1/2	12.5	27.0	12	39.0	21.0	50	0.70
0.83 21.2	796253-6*	1/2	17.0	29.5	12	43.5	27.0	50	1.00
1.12 28.5	796253-7*	3/4	21.0	37.0	14	47.5	34.0	25	1.40
1.35 34.5	796253-8*	1	27.5	44.0	16	52.0	40.0	25	2.20
1.67 42.5	796253-9	1 1/4	36.5	52.0	18	56.5	49.0	25	3.10
1.67 42.5	1-796253-0	1 1/2	36.5	55.9	18	56.5	49.0	25	3.50
2.14 54.5	1-796253-1	1 1/2	48.5	64.0	18	57.0	60.0	10	4.20
2.14 54.5	1-796253-2	2	48.5	65.0	21	60.0	60.0	10	4.50

\*GGVS certified

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

One-piece plastic quick screw connection, conically sealing, with PG-thread acc. to DIN 40430 for corrugated tubings, as well as Reducing or Extending.

**Construction**

Screw connection case with hexagon wrench surface and fixed PG connecting thread DIN 40430 with conic sealing case.

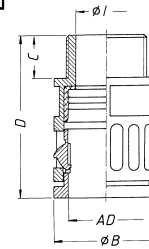
**Material**

High-quality, impact resistant plastic material (PA).

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions. Smallest inner-Ø I ≥ tubing inside diameter.

**RQG1-P (IP 66)**



**Protective system**

IP 66 acc. EN 60529

**Temperature range**

From approx. -30°C up to approx. +100°C.

**Application**

For expert assembly, as protective insulating screw connection suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Suitable for tubing types**

Corrugated tubing, type: **ROHR flex**.

Trade Size* Tubing Outer-Ø AD	RQG1-P (Grey) Part Number	RQG1-P (Black) Part Number	Thread DIN 40430 PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Wrench size across flats SW	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	969806-1	969805-1	7	7.0	17.0	10	32.5	15.5	50	0.35
0.39 10.0	1-969806-0	3-969806-0	9	7.0	18.5	10	32.5	15.5	50	0.35
0.39 10.0	1-969806-1	3-969806-1	11	7.0	21.0	10	32.5	15.5	50	0.40
0.39 10.0	1-969806-2	3-969806-2	13.5	7.0	23.0	10	32.5	15.5	25	0.45
0.51 13.0	1-969806-3	3-969806-3	7	8.0	20.0	10	35.0	18.0	50	0.45
0.51 13.0	969806-2	969805-2	9	10.0	20.0	10	35.0	18.0	50	0.45
0.51 13.0	1-969806-4	3-969806-4	11	10.0	21.0	10	35.0	18.0	50	0.50
0.51 13.0	1-969806-5	3-969806-5	13.5	10.0	23.0	10	35.0	18.0	25	0.50
0.62 15.8	969806-3	969805-3	11	12.5	23.0	10	37.0	21.0	50	0.55
0.62 15.8	1-969806-6	3-969806-6	13.5	12.5	23.0	10	37.0	21.0	25	0.60
0.62 15.8	1-969806-7	3-969806-7	16	12.5	26.5	10	37.0	21.0	25	0.65
0.72 18.5	969806-9	2-969806-9	13.5	13.5	25.5	11	40.0	24.0	50	0.80
0.83 21.2	1-969806-8	3-969806-8	13.5	15.4	29.5	12	43.5	27.0	10	0.90
0.83 21.2	969806-4	969805-4	16	17.0	29.5	12	43.5	27.0	50	1.00
1.12 28.5	1-969806-9	3-969806-9	16	17.0	37.0	12	46.0	34.0	10	1.50
1.12 28.5	969806-5	969805-5	21	23.5	37.0	12	46.0	34.0	25	1.40
1.35 34.5	969806-6	969805-6	29	30.5	44.0	12	48.0	40.0	25	2.20
1.67 42.5	969806-7	969805-7	36	36.5	52.0	12	50.5	49.0	25	2.95
2.14 54.5	969806-8	969805-8	48	48.5	64.0	15	54.0	60.0	10	4.30

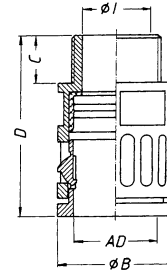
\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



Corrugated Plastic Tubing Connections (Continued)

Plastic quick screw connection with NPT-thread.

RQG-N  
(IP 67)



Trade Size** Outer-Ø AD	RQG-N (Grey) Part Number	RQG-N (Black) Part Number	Thread NPT	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Wrench size across flats SW	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	2-796253-1	796253-1	1/4"	7.0	17.0	11.5	34.0	15.5	50	0.35
0.51 13.0	2-796253-2	796253-2	1/4"	9.5	20.0	12.0	37.0	18.0	50	0.40
0.51 13.0	2-796253-3	796253-3	3/8"	10.0	20.0	12.0	37.0	18.0	50	0.45
0.62 15.8	2-796253-4	796253-4	3/8"	11.5	20.0	12.0	37.0	18.0	50	0.45
0.62 15.8	2-796253-5	796253-5	1/2"	12.5	27.0	12.0	39.0	21.0	50	0.70
0.83 21.2	2-796253-6	796253-6	1/2"	17.0	29.5	12.0	43.5	27.0	50	1.00
0.70 17.8	—	5020038212*	3/8"	12.5	26.0	12.0	39.5	24.0	50	0.80
0.70 17.8	—	1-796253-3	1/2"	16.0	29.5	13.0	38.5	27.0	50	1.00
0.86 21.8	—	1-796253-4	1/2"	16.0	29.5	13.0	43.5	27.0	50	1.00
1.12 28.5	2-796253-9	796253-7	3/4"	21.0	37.0	14.0	47.5	34.0	25	1.40
1.35 34.4	3-796253-0	796253-8	1"	27.5	44.0	16.0	52.0	40.0	25	2.20
1.67 42.5	3-796253-1	796253-9	1 1/4"	36.5	52.0	18.0	56.5	49.0	25	3.10
1.67 42.5	3-796253-2	1-796253-0	1 1/2"	36.5	55.0	18.0	56.5	49.0	25	3.50
2.15 54.5	—	1-796253-1	1 1/2"	48.5	64.0	18.0	57.0	60.0	10	4.20
2.15 54.5	—	1-796253-2	2"	48.5	65.0	21.0	60.0	60.0	10	4.50

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections** (Continued)

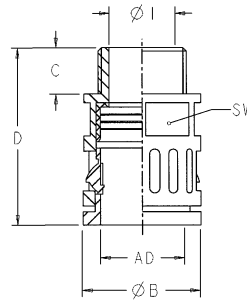
**Performance Characteristics**

Plastic straight connector with CTG thread.

**Color**

Black

**RQG-CTG**



Trade Size* Outer-Ø AD	RQG-CTG Part Number	Thread CTG	Thread Whitworth G	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Hex Width SW	Packet/ Pieces	Weight kg/100 p. Approx.
<b>0.39</b> 10.0	796808-1	—	1/4"	7.0	17.0	10.0	32.5	15.5	50	0.35
<b>0.51</b> 13.0	796808-2	—	1/4"	7.0	20.0	10.0	35.0	18.0	50	0.42
<b>0.51</b> 13.0	796808-3	—	3/8"	10.0	21.0	10.0	35.0	18.0	50	0.45
<b>0.51</b> 13.0	796808-4	G 16	1/2"	10.0	27.0	14.0	39.5	18.0	50	0.45
<b>0.62</b> 15.8	796808-5	—	3/8"	10.0	23.0	10.0	37.0	21.0	50	0.60
<b>0.62</b> 15.8	796808-6	G 16	1/2"	12.5	27.0	14.0	41.5	21.0	50	0.60
<b>0.83</b> 21.2	796808-7	G 16	1/2"	16.0	29.5	14.0	45.5	27.0	50	1.00
<b>1.12</b> 28.5	796808-8	G 22	3/4"	20.5	37.0	14.0	48.0	34.0	25	1.40
<b>1.35</b> 34.5	796808-9	G 28	1"	27.5	44.0	16.0	52.0	40.0	25	2.20
<b>1.67</b> 42.5	1-796808-0	G 36	1 1/4"	35.0	52.0	18.0	56.5	49.0	25	2.80
<b>2.15</b> 54.5	1-796808-1	—	1 1/2"	36.5	65.5	15.0	54.0	59.0	10	4.40
<b>2.15</b> 54.5	1-796808-2	G 54	2"	48.5	64.5	18.0	60.0	60.0	10	4.50

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

Plastic quick screw connection elbow with PG-outer thread acc. to DIN 40430.

**Construction**

Screw connection case, 90° elbow type/bend 90° and 45° with fixed thread as well as an integrated snap-in sleeve and sealing.

**Material**

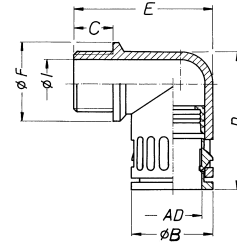
High quality, impact resistant plastic (PA). Sealing: TPE.

**Properties**

Rational tubing assembly due to one-piece screw connection with push-in lock. Simple dismounting by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions.

- Resistance against oil and benzene
- More resistant to acids and solvents
- Free of silicon, cadmium and halogen.

**RQW-P (IP 67)**



**Protective system**

IP 67 acc. EN 60529/IEC 529

**Temperature range**

From approx. -30°C up to +100°C

**Application**

For expert assembly, as protective insulation screw connection suited acc. to the application rules of EN 60204 in the machine and plant construction.

Trade Size** Tubing Outer-Ø AD	RQW-P (Grey) Part Number	RQW-P (Black) Part Number	Thread DIN 40430 PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Total Height E	Connection Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	969818-1	969817-1	7	8.5	17.0	10	33.5	32.0	16.0	50	0.40
0.51 13.0	969818-2*	969817-2*	9	12.0	20.0	10	36.0	34.0	20.0	50	0.60
0.51 13.0	1-969818-0	1-969817-0	11	14.0	20.0	10	39.0	34.0	23.0	50	0.75
0.51 13.0	1-969818-1	1-969817-1	13.5	15.5	20.0	10	40.0	35.0	25.0	50	0.80
0.62 15.8	969818-3	969817-3*	11	15.5	23.0	10	42.0	37.5	23.0	50	0.80
0.72 18.5	969818-9	969817-9	13.5	13.5	26.5	11	46.0	44.0	27.0	50	1.40
0.83 21.2	969818-4*	969817-4*	16	18.0	29.5	12	50.0	47.0	27.0	50	1.60
1.12 28.5	969818-5*	969817-5*	21	24.0	37.0	12	57.0	55.0	34.0	25	2.50
1.35 34.5	969818-6*	969817-6*	29	32.0	44.0	12	67.5	63.0	43.0	10	4.10
1.67 42.5	969818-7	969817-7	36	36.5	52.0	12	83.0	70.0	52.0	10	6.60
2.14 54.5	969818-8	969817-8	48	48.5	64.0	14	88.0	83.0	64.0	5	9.50

\*GGVS Certified

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

Plastic quick screw connection elbow with metric ISO outer thread acc. to EN 60423.

**Construction**

Screw connection case, 90° elbow type/bend 90° and 45° with fixed thread as well as an integrated snap-in sleeve and sealing.

**Material**

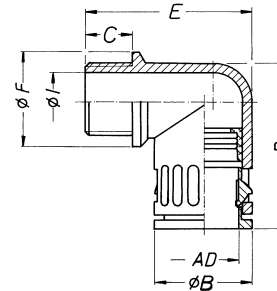
High quality, impact resistant plastic (PA). Sealing: TPE.

**Properties**

Rational tubing assembly due to one-piece screw connection with push-in lock. Simple dismounting by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions.

- Resistance against oil and benzine
- More resistant to acids and solvents
- Free of silicon, cadmium and halogen.

**RQW-M (IP 67)**



**Protective system**

IP 67 acc. EN 60529/IEC 529

**Temperature range**

From approx. -30°C up to +100°C

**Application**

For expert assembly, as protective insulation screw connection suited acc. to the application rules of EN 60204 in the machine and plant construction.

Trade Size** Tubing Outer-Ø AD	RQW-M (Grey) Part Number	RQW-M (Black) Part Number	Thread EN 60423 Metric	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Total Height E	Connection Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	2-796284-1	796284-1	10 x 1.0	7.0	17.0	12	33.5	34.0	16.0	50	0.40
0.51 13.0	2-796284-2	796284-2	12 x 1.5	8.0	20.0	12	36.0	36.5	20.0	50	0.50
0.51 13.0	2-796284-3	796284-3*	16 x 1.5	12.0	20.0	12	36.0	36.5	20.0	50	0.80
0.62 15.8	2-796284-4	796284-4	16 x 1.5	12.0	23.0	12	42.0	40.5	23.0	50	0.90
0.62 15.8	2-796284-5	796284-5*	20 x 1.5	15.5	23.0	13	42.0	41.5	24.0	50	1.00
0.83 21.2	2-796284-6	796284-6	20 x 1.5	15.5	29.5	13	50.0	49.0	27.0	50	1.50
0.83 21.2	2-796284-7	796284-7*	25 x 1.5	18.0	29.5	13	50.0	49.0	29.5	50	1.60
1.12 28.5	2-796284-8	796284-8	25 x 1.5	18.0	37.0	13	57.0	57.0	34.0	25	2.50
1.12 28.5	2-796284-9	796284-9*	32 x 1.5	24.0	37.0	15	57.0	59.0	37.0	25	2.60
1.35 34.5	3-796284-0	1-796284-0	32 x 1.5	24.0	44.0	15	67.5	67.0	43.0	10	3.80
1.35 34.5	3-796284-1	1-796284-1*	40 x 1.5	32.0	44.0	15	67.5	67.0	45.0	10	4.00
1.67 42.5	3-796284-2	1-796284-2	40 x 1.5	32.0	52.0	15	83.0	74.5	52.0	10	6.40
1.67 42.5	3-796284-3	1-796284-3	50 x 1.5	39.0	52.0	16	83.0	75.5	55.0	10	6.60
2.14 54.5	3-796284-4	1-796284-4	50 x 1.5	39.0	64.0	16	88.0	86.5	64.0	5	9.00
2.14 54.5	3-796284-5	1-796284-5	63 x 1.5	53.0	64.0	16	88.0	86.5	68.0	5	9.40

\*GGVS certified

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

Plastic quick screw connection elbow, conically sealing, with PG-outer thread acc. to DIN 40430.

**Construction**

Screw connection case, 90° elbow type and fixed as well as an integrated snap-in sleeve and conic seal case.

**Material**

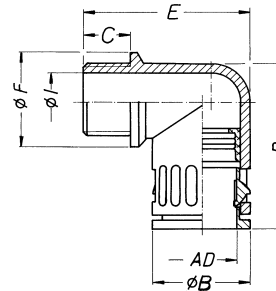
High quality, impact resistant plastic (PA).

**Properties**

Rational tubing assembly due to one-piece screw connection with push-in lock. Simple dismounting by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions.

- Resistance against oil and benzene
- More resistant to acids and solvents
- Free of silicon, cadmium and halogen.

**RQW1-P (IP 65)**



**Protective system**

IP 65 acc. EN 60529/IEC 529

**Temperature range**

From approx. -30°C up to +100°C

**Application**

For expert assembly, as protective insulation screw connection suited acc. to the application rules of EN 60204 in machine and plant construction.

Trade Size** Tubing Outer-Ø	RQW1-P (Grey) Part Number	RQW1-P (Black) Part Number	Thread DIN 40430 PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Total Height E	Connection Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
<b>0.39</b> 10.0	969820-1	<b>5020050207*</b>	7	8.5	17.0	10	33.5	32.0	16.0	50	0.40
<b>0.51</b> 13.0	969820-2	969819-2	9	12.0	20.0	10	36.0	34.0	20.0	50	0.60
<b>0.62</b> 15.8	969820-3	969819-3	11	15.5	23.0	10	42.0	37.5	23.0	50	0.80
<b>0.72</b> 18.5	969820-9	<b>5020050213*</b>	13.5	13.5	26.5	11	46.0	44.0	27.0	50	1.40
<b>0.83</b> 21.2	969820-4	969819-4	16	18.0	29.5	12	50.0	47.0	27.0	50	1.60
<b>1.12</b> 28.5	969820-5	969819-5	21	24.0	37.0	12	57.0	55.0	34.0	25	2.45
<b>1.35</b> 34.5	969820-6	969819-6	29	32.0	44.0	12	67.5	63.0	43.0	10	3.95
<b>1.67</b> 42.5	969820-7	969819-7	36	36.5	52.0	12	83.0	70.0	52.0	10	6.50
<b>2.14</b> 54.5	969820-8	969819-8	48	48.5	64.0	14	88.0	83.0	64.0	5	9.00

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections** (Continued)

**Performance Characteristics**

Plastic quick screw connection elbow with NPT-outer thread.

**Construction**

Screw connection case, 90° elbow type/bend 90° and 45° with fixed thread as well as an integrated snap-in sleeve and sealing.

**Material**

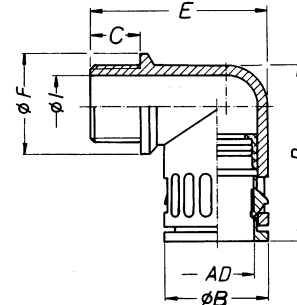
High quality, impact resistant plastic (PA). Sealing: TPE.

**Properties**

Rational tubing assembly due to one-piece screw connection with push-in lock. Simple dismounting by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions.

- Resistance against oil and benzene
- More resistant to acids and solvents
- Free of silicon, cadmium and halogen.

**RQW-N (IP 67)**



**Protective system**

IP 67 acc. EN 60529/IEC 529

**Temperature range**

From approx. -30°C up to +100°C

**Application**

For expert assembly, as protective insulation screw connection suited acc. to the application rules of EN 60204 in the machine and plant construction.

Trade Size* Tubing Outer-Ø	RQW-N (Grey) Part Number	RQW-N (Black) Part Number	Thread NPT	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Total Height E	Connection Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
0.39 10.0	2-796254-1	796254-1	1/4	8.5	17.0	10.0	33.5	32.0	16.0	50	0.40
0.51 13.0	2-796254-2	796254-2	1/4	10.0	20.0	11.5	36.0	36.0	20.0	50	0.60
0.62 15.8	2-796254-3	796254-3	3/8	12.5	23.0	12.0	42.0	40.5	23.0	50	0.80
0.62 15.8	2-796254-4	796254-4	1/2	16.0	26.0	12.0	42.0	40.5	26.0	50	1.10
0.83 21.2	2-796254-5	796254-5	1/2	16.0	29.5	12.0	50.0	47.0	27.0	50	1.60
1.12 28.5	2-796254-6	796254-6	3/4	21.0	37.0	14.0	57.5	56.0	34.0	25	2.80
1.35 34.5	2-796254-7	796254-7	1	28.0	44.0	16.0	67.5	63.0	43.0	10	5.60
1.67 42.5	2-796254-8	796254-8	1 1/4	36.5	52.0	18.0	83.0	76.0	52.0	10	5.10
1.67 42.5	2-796254-9	796254-9	1 1/2	36.5	54.0	18.0	83.0	76.0	54.0	10	5.50
2.14 54.5	3-796254-0	1-796254-0	1 1/2	48.5	64.0	18.0	88.0	87.0	64.0	5	6.70
2.14 54.5	3-796254-1	1-796254-1	2	48.5	66.0	21.0	88.0	90.0	66.0	5	7.00

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



**Corrugated Plastic Tubing Connections** (Continued)

**Performance Characteristics**

Plastic connection elbow with CTG thread.

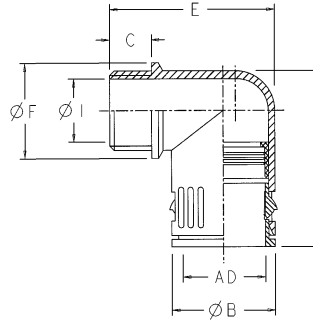
**Material**

High quality plastic (PA).

**Color**

Black

**RQW-CTG**



Trade Size* Tubing Outer-Ø	RQW-CTG Part Number	Thread CTG	Thread Whitworth G	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Total Height E	Flange Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
<b>0.51</b> 13.0	796809-1	G 16	1/2"	16.5	20.0	14.0	36.0	40.0	27.0	50	0.80
<b>0.62</b> 15.8	796809-2	G 16	1/2"	16.5	23.0	14.0	42.0	43.0	27.0	50	1.00
<b>0.83</b> 21.2	796809-3	G 16	1/2"	16.5	29.5	14.0	50.0	49.0	27.0	50	1.60
<b>1.12</b> 28.5	796809-4	G 22	3/4"	21.5	37.5	14.0	57.0	57.0	34.0	25	2.60
<b>1.35</b> 34.5	796809-5	G 28	1"	28.5	44.0	16.0	67.5	66.5	43.0	10	4.00
<b>1.67</b> 42.5	796809-6	G 36	1 1/4"	36.0	52.0	18.0	83.0	76.0	52.0	10	6.60
<b>2.14</b> 54.5	796809-7	G 54	2"	54.5	64.0	21.0	88.0	89.5	64.0	5	9.40

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Performance Characteristics**

One-piece plastic quick screw connection elbow, conically sealing, with PG-thread for corrugated tubings.

**Construction**

Screw connection case, 90° elbow type and fixed PG connecting thread DIN 40430, with conic sealing case.

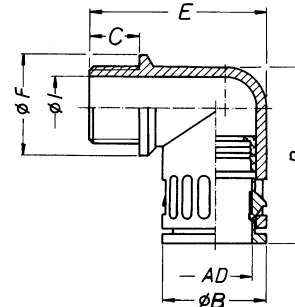
**Material**

High-quality, impact resistant plastic material (PA).

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions. Smallest inner-Ø I ≥ tubing inside diameter.

**RQWC-N (IP 67)**



**Protective system**

IP 67 acc. EN 60529

**Temperature range**

From approx. -30°C up to +100°C.

**Application**

For expert assembly, as protective insulating screw connection suited acc. to

the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Black

**Suitable for tubing types**

Corrugated tubing, type: **ROHRflex**.

Trade Size* Tubing Outer-Ø	RQWC-N (Black) Part Number	Thread NPT	Smallest Inner-Ø I (mm)	Largest Outer-Ø B	Length of Thread C	Total Length D	Total Height E	Connection Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
<b>.051</b> 13.0	796493-1	1/4	8.5	17.0	10.0	33.5	32.0	16.0	50	0.40
<b>0.62</b> 15.8	796493-2	3/8	10.0	20.0	11.5	36.0	36.0	20.0	50	0.60
<b>0.70</b> 17.8	796493-3	3/8	12.5	26.0	12.0	45.0	43.5	25.0	50	1.40
<b>0.70</b> 17.8	796493-4	1/2	16.0	29.5	13.0	50.0	46.5	27.0	50	1.60
<b>0.85</b> 21.8	796493-5	1/2	16.0	29.5	13.0	50.0	48.5	27.0	50	1.60
<b>1.12</b> 28.5	796493-6	3/4	21.0	37.0	14.0	57.5	56.0	34.0	25	2.80
<b>1.35</b> 34.4	796493-7	1	28.0	44.0	16.0	67.5	56.0	43.0	10	4.80
<b>1.67</b> 42.5	796493-8	1 1/4	16.0	29.5	12.0	50.0	47.0	27.0	10	1.60

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Electronics**

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

One-piece plastic quick screw connection with UNEF-inner thread for corrugated tubings.

**Construction**

Screw connection case with hexagon wrench surface fixed UNEF inner thread as well as an integrated snap-in sleeve and sealing.

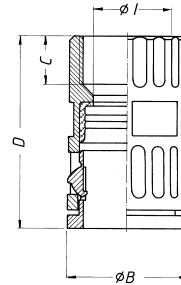
**Material**

High-quality, impact resistant plastic material (PA).  
Sealing: Santoprene®

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple

**ROG2-U (IP 67)**



disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions. Smallest inner-Ø I ≥ tubing inside diameter.

**Protective system**  
IP 67 acc. EN 60529

**Temperature range**

From approx. -30°C up to +100°C.

**Application**

For expert assembly, as protective insulating screw connection suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Suitable for tubing types**

Corrugated tubing, type: **ROHRflex**.

**Thread dimensions**

Other UNEF thread dimensions on inquiry.

Trade Size** Tubing Outer-Ø AD	RQG2-U (Grey) Part Number	RQG2-U (Black) Part Number	Inner Thread UNEF	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Wrench Size Total Length D	Across Flats SW	Packet/ Pieces	Weight kg/100 p. Approx.
0.51 13.0	969808-2	969807-2	1/2" (0.500) - 28	10.0	20.0	8	36.6	18.0	50	0.50
0.51 13.0	1-969808-2	1-969807-2	5/8" (0.625) - 24	10.0	20.6	8	36.6	18.0	50	0.55
0.51 13.0	2-969808-2	2-969807-2	3/4" (0.750) - 20	10.0	23.0	9.5	38.5	18.0	50	0.60
0.62 15.8	969810-3	969809-3	5/8" (0.625) - 24	12.5	23.6	9.5	41.7	21.0	50	0.60
0.62 15.8	1-969810-3	1-969809-3	3/4" (0.750) - 20	12.5	23.6	9.5	41.7	21.0	50	0.65
0.62 15.8	3-969810-3	969807-4	15/16" (0.9375) - 20	12.5	30.0	9.5	45.5	21.0	50	0.95
0.62 15.8	2-969810-3	2-969809-3	1" (1.000) - 20	12.5	30.0	9.5	45.5	21.0	50	1.00
0.83 21.2	969812-5	969811-3	5/8" (0.625) - 24	12.5	30.1	9.5	50.5	27.0	50	1.10
0.83 21.2	969812-4	969811-4	7/8" (0.875) - 20	17.0	29.5	9.5	50.5	27.0	50	1.00
0.83 21.2	1-969812-4	1-969811-4	15/16" (0.9375) - 20	17.0	30.1	9.5	50.3	27.0	50	1.10
0.83 21.2	2-969812-4	2-969811-4	1" (1.000) - 20	17.0	30.1	9.5	50.3	27.0	50	1.10
0.83 21.2	3-969812-4	3-969811-4	1 3/16" (1.1875) - 18	17.0	34.6	9.5	52.3	27.0	50	1.40
0.83 21.2	5-969812-7	6-969811-4	1 3/8" (1.375) - 18	17.0	41.0	9.5	52.5	27.0	50	2.15
0.83 21.2	4-969812-4	4-969811-4	1 7/16" (1.4375) - 18	17.0	41.0	9.5	52.5	27.0	50	1.45
0.83 21.2	5-969812-4	5-969811-4	1 3/4" (1.750) - 18	17.0	49.0	9.5	52.5	27.0	50	1.50
1.12 28.5	4-969814-5	4-969813-7	15/16" (0.9375) - 20	17.0	37.0	9.5	52.5	34.0	25	1.30
1.12 28.5	<b>5020047014*</b>	<b>5020047214*</b>	1" (1.000) - 20	23.5	37.0	9.5	54.0	34.0	25	2.05
1.12 28.5	969814-5	969813-5	1 3/16" (1.1875) - 18	23.5	37.0	9.5	52.5	34.0	25	1.45
1.12 28.5	1-969814-5	1-969813-5	1" (1.000) - 20	23.5	37.0	9.5	54.0	34.0	25	1.40
1.12 28.5	2-969814-5	2-969813-5	1 3/8" (1.375) - 18	23.5	41.0	9.5	54.0	34.0	25	1.50
1.12 28.5	3-969814-5	3-969813-5	1 7/16" (1.4375) - 18	23.5	41.0	9.5	54.0	34.0	25	1.50
1.35 34.5	969816-6	969815-6	1 7/16" (1.4375) - 18	30.5	41.0	9.5	55.0	40.0	25	1.80
1.35 34.5	1-969816-6	1-969815-6	1 3/4" (1.750) - 18	30.5	49.0	9.5	56.0	40.0	25	2.55
1.35 34.5	2-969816-6	2-969815-6	2" (2.000) - 18	30.5	55.0	9.5	56.0	40.0	10	2.80
1.35 34.5	—	2-969815-9	1 3/8" (1.375) - 18	23.5	52.0	9.5	56.0	40.0	10	2.30

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

One-piece plastic quick screw connection, conically sealing, with UNEF-inner thread for corrugated tubings.

**Construction**

Screw connection case with hexagon wrench surface and fixed UNEF inner thread with conic sealing case.

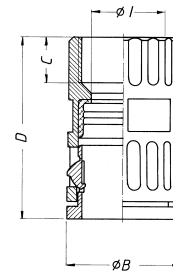
**Material**

High-quality, impact resistant plastic material (PA).

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple

**RQG3-U (IP 66)**



disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions. Smallest inner-Ø I ≥ tubing inside diameter.

**Protective system**  
IP 66 acc. EN 60529

**Temperature range**

From approx. -30°C up to +100°C.

**Application**

For expert assembly, as protective insulating screw connection suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

**Color**

Grey and black

**Suitable for tubing types**

Corrugated tubing, type: **ROHRflex**.

**Thread dimensions**

Other UNEF thread dimensions on inquiry.

Trade Size** Tubing Outer-Ø AD	RQG3-U (Grey) Part Number	RQG3-U (Black) Part Number	Inner Thread UNEF			Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Wrench Size Across Flats SW	Packet/ Pieces	Weight kg/100 p. Approx.
0.51 13.0	969822-2	969821-2	1/2"	(0.500)	- 28	10.0	20.0	8	36.6	18.0	50	0.50
0.51 13.0	1-969822-2	1-969821-2	5/8"	(0.625)	- 24	10.0	20.6	8	36.6	18.0	50	0.55
0.51 13.0	2-969822-2	2-969821-2	3/4"	(0.750)	- 20	10.0	23.0	9.5	38.5	18.0	50	0.60
0.62 15.8	969824-3	969823-3	5/8"	(0.625)	- 24	12.5	23.6	9.5	41.7	21.0	50	0.60
0.62 15.8	1-969824-3	1-969823-3	3/4"	(0.750)	- 20	12.5	23.6	9.5	41.7	21.0	50	0.65
0.62 15.8	3-969824-3	5020054225*	15/16"	(0.9375)	- 20	12.5	30.0	9.5	45.5	21.0	50	0.95
0.62 15.8	2-969824-3	2-969823-3	1"	(1.000)	- 20	12.5	30.0	9.5	45.5	21.0	50	1.00
0.83 21.2	969826-3	969825-3	5/8"	(0.625)	- 24	12.5	30.1	9.5	50.5	27.0	50	1.10
0.83 21.2	969826-4	969825-4	7/8"	(0.875)	- 20	17.0	29.5	9.5	50.5	27.0	50	1.00
0.83 21.2	1-969826-4	1-969825-4	15/16"	(0.9375)	- 20	17.0	30.1	9.5	50.3	27.0	50	1.10
0.83 21.2	2-969826-4	2-969825-4	1"	(1.000)	- 20	17.0	30.1	9.5	50.3	27.0	50	1.10
0.83 21.2	3-969826-4	3-969825-4	1 3/16"	(1.1875)	- 18	17.0	34.6	9.5	52.3	27.0	50	1.40
0.83 21.2	6-969826-4	6-969825-4	1 3/8"	(1.375)	- 18	17.0	41.0	9.5	52.5	27.0	50	1.42
0.83 21.2	4-969826-4	4-969825-4	1 7/16"	(1.4375)	- 18	17.0	41.0	9.5	52.5	27.0	50	1.45
0.83 21.2	5-969826-4	5-969825-4	1 3/4"	(1.750)	- 18	17.0	49.0	9.5	52.5	27.0	50	1.50
1.12 28.5	4-969828-3	4-969827-7	15/16"	(0.9375)	- 20	17.0	37.0	9.5	52.5	34.0	25	1.30
1.12 28.5	1-969828-5	1-969827-5	1"	(1.000)	- 20	23.5	37.0	9.5	54.0	34.0	25	1.40
1.12 28.5	969828-5	969827-5	1 3/16"	(1.1875)	- 18	23.5	37.0	9.5	52.5	34.0	25	1.45
1.12 28.5	2-969828-5	2-969827-5	1 3/8"	(1.375)	- 18	23.5	41.0	9.5	54.0	34.0	25	1.50
1.12 28.5	3-969828-5	3-969827-5	1 7/16"	(1.4375)	- 18	23.5	41.0	9.5	54.0	34.0	25	1.50
1.35 34.5	2-969830-9	2-969829-9	1 3/8"	(1.375)	- 18	23.5	44.0	9.5	56.0	40.0	10	2.80
1.35 34.5	969830-6	969829-6	1 7/16"	(1.4375)	- 18	30.5	41.0	9.5	55.0	40.0	25	1.80
1.35 34.5	1-969830-6	1-969829-6	1 3/4"	(1.750)	- 18	30.5	49.0	9.5	56.0	40.0	25	2.55
1.35 34.5	2-969830-6	2-969829-6	2"	(2.000)	- 18	30.5	55.0	9.5	56.0	40.0	10	2.80

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

One-piece plastic quick screw connection with PG-thread and additional strain relief for corrugated tubings.

**Construction**

Screw connection case with hexagon wrench surface fixed connecting thread DIN 40430 as well as an integrated snap-in sleeve, sealing and strain relief.

**Material**

High-quality, impact resistant plastic material (PA).  
Sealing: Santoprene®

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest inner- $\varnothing$  I  $\geq$  tubing inside diameter as well as cable clamp possibility in the indicated range.

**Protective system**

IP 67 acc. EN 60529/IEC 529

**Temperature range**

From approx.  $-30^{\circ}\text{C}$  up to approx.  $+100^{\circ}\text{C}$ .

**Application**

For expert assembly, as protective insulating screw connection suited acc. to the application rules of DIN EN 60204 in the machine and plant construction with possibility of cable strain relief.

**Color**

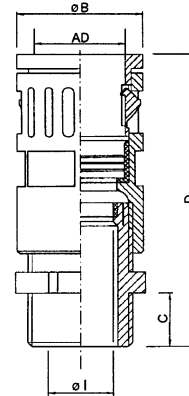
Grey and black

**Suitable for tubing types**

Corrugated tubing type:  
**ROHRflex**

Other thread dimensions on inquiry.

**RQGZ-P (IP 67)**



Trade Size* Tubing Outer- $\varnothing$ AD	RQGZ-P (Grey) Part Number	RQGZ-P (Black) Part Number	Thread PG	Smallest Inner- $\varnothing$ I	Largest Outer- $\varnothing$ B	Length of Thread C	Total Length D	Wrench Size Across Flats SW	Packet/ Pieces	Weight kg/100 p. Approx.
<b>0.39</b> 10.0	969836-1	969835-1	7	7.0	17.0	8	51.0	16.0	20	0.80
<b>0.51</b> 13.0	969836-2	969835-2	9	8.0	20.0	8	53.0	18.0	20	1.00
<b>0.62</b> 15.8	969836-3	969835-3	11	10.0	23.0	8	59.0	21.0	20	1.30
<b>0.62</b> 15.8	969836-9	969835-9	13.5	12.0	27.0	8	59.0	21.0	20	1.40
<b>0.72</b> 18.5	1-969836-0	1-969835-0	13.5	12.0	27.0	8	59.0	24.0	20	1.60
<b>0.83</b> 21.2	1-969836-1	1-969835-1	13.5	12.0	29.5	8	70.0	27.0	10	1.90
<b>0.83</b> 21.2	969836-4	969835-4	16	14.0	29.5	10	72.0	27.0	10	1.70
<b>1.12</b> 28.5	969836-5	969835-5	21	18.0	37.0	11	82.0	34.0	10	2.4
<b>1.35</b> 34.5	969836-6	969835-6	29	25.0	44.0	12	85.0	40.0	10	4.2
<b>1.67</b> 42.5	969836-7	969835-7	36	32.0	52.0	13	106.0	49.0	10	10.0
<b>2.14</b> 54.5	969836-8	969835-8	48	44.0	64.0	14	112.0	60.0	10	13.0

**\*Advice:** For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer- $\varnothing$ ).  
**Note:** To ensure a high protection system between cable gland insert and screw connection housing it is necessary to use a sealing compound.



**Corrugated Plastic Tubing Connections (Continued)**

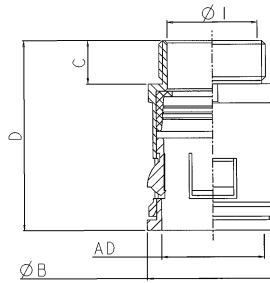
**Performance Characteristics**

Straight metal connection.

**Material**

Brass. Finish: Nickel.

**RQGM-P**



Trade Size Tubing Outer-Ø AD	RQGM-P Part Number	Thread PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Hex Width SW	Packet/Pieces	Weight kg/100 p. Approx.
0.39 10.0	969837-1	7	9.5	17.0	7.0	28.5	15.0	50	0.80
0.51 13.0	969837-2	9	11.5	21.0	7.0	30.5	19.0	50	1.20
0.62 15.8	969837-3	11	15.5	24.5	7.5	33.5	23.0	50	2.00
0.83 21.2	969837-4	16	19.0	29.0	7.5	38.5	27.0	50	3.00
1.12 28.5	969837-5	21	24.0	37.0	10.0	42.5	34.0	25	4.00
1.35 34.5	969837-6	29	32.5	46.0	10.0	44.5	43.0	25	6.40
1.67 42.5	969837-7	36	40.0	55.0	10.0	46.5	52.0	25	9.60
2.14 54.5	969837-8	48	50.0	67.0	10.0	47.0	63.0	10	11.60

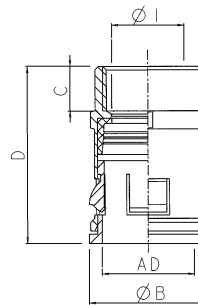
**Performance Characteristics**

Metal connection, inner thread.

**Material**

Brass. Finish: Nickel.

**RQGM2-P**



Trade Size Tubing Outer-Ø AD	RQGM-P Part Number	Thread PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length D	Hex Width SW	Packet/Pieces	Weight kg/100 p. Approx.
0.39 10.0	969838-1	7	9.5	17.0	7.0	28.5	15.0	50	1.00
0.51 13.0	969838-2	9	11.5	21.0	7.0	30.5	19.0	50	1.50
0.62 15.8	969838-3	11	15.5	24.5	8.0	33.5	23.0	50	2.30
0.83 21.2	969838-4	16	19.0	29.5	8.0	38.5	27.0	50	3.20
1.12 28.5	969838-5	21	24.0	37.0	12.0	42.5	34.0	25	4.20
1.35 34.5	969838-6	29	32.5	46.0	12.0	44.5	43.0	25	6.90
1.67 42.5	969838-7	36	40.0	55.0	12.0	46.5	52.0	25	10.10
2.14 54.5	969838-8	48	50.0	67.0	12.0	47.0	63.0	10	12.20

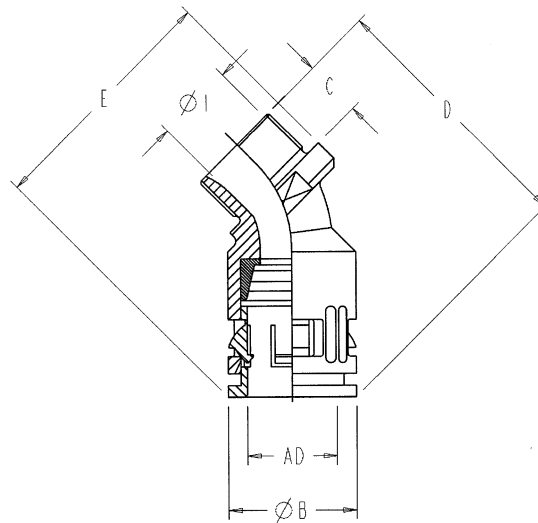
**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

Plastic Bend, 45° with PG-Thread.

**Color**  
Black

**RQB1-45**



Trade Size Tubing Outer-Ø AD	RQB1-45 Part Number	Thread PG	Smallest Inner-Ø I	Largest Outer-Ø B	Length of Thread C	Total Length E	Total Height D	Hex Width SW	Packet/Pieces	Weight kg/100 p. Approx.
0.39 10.0	796384-1	7	7.9	17.0	10.0	39.0	55.0	16.5	50	0.60
0.51 13.0	796384-2	9	9.0	20.0	12.0	40.5	56.7	20.0	50	0.80
0.62 15.8	796384-3	11	10.0	23.0	12.0	44.6	59.3	24.0	50	1.10
0.73 18.5	796384-4	13.5	12.5	25.0	12.0	46.0	59.0	26.0	50	1.30
0.83 21.2	796384-5	16	15.0	29.5	13.0	48.0	72.0	26.0	50	1.70
1.12 28.5	796384-6	21	20.0	37.0	14.0	63.8	83.8	36.0	25	2.90
1.35 34.5	796384-7	29	30.0	44.0	14.0	73.6	98.6	45.0	10	4.00
1.67 42.5	796384-8	36	39.0	52.0	17.0	82.4	109.0	58.0	10	6.50
2.14 54.5	796384-9	48	45.5	64.0	17.0	97.2	122.0	69.5	5	8.50

**Corrugated Plastic Tubing Connections (Continued)**

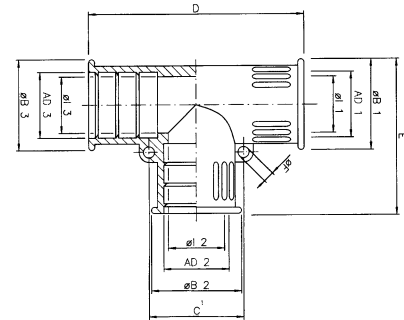
**Performance Characteristics**

Plastic T-Distributor.

**Material**

Plastic.

**RQT (IP 67)**



Trade Size*	RQT (Grey) Part Number	RQT (Black) Part Number	Smallest Inner-Ø Ø 1	Outer-Ø Ø B	Length of Thread D	Packet/Pieces	Weight kg/100 p. Approx.
3 x 0.39 10.0	2-796281-1	796281-8	7.0	17.5	46.5	10	0.60
3 x 0.51 13.0	2-796281-2	796281-1	10.0	21.0	51.0	10	0.80
3 x 0.62 15.8	2-796281-3	796281-2	14.0	25.0	63.0	10	1.40
3 x 0.72 18.5	2-796281-4	796281-9	15.0	26.5	70.5	10	1.60
3 x 0.83 21.2	2-796281-5	796281-3	18.0	29.5	71.0	10	1.80
2 x 0.83 / 1 x 1.12 21.2 / 28.5	2-796281-6	796281-4	18.0	32.0	78.0	10	2.80
2 x 1.12 / 1 x 1.12 28.5 / 15.8	2-796281-7	1-796281-0	25.5	36.5	65.0	10	2.50
3 x 1.12 28.5	2-796281-8	796281-5	25.5	36.5	77.0	10	2.70
2 x 1.12 / 1 x 1.35 28.5 / 34.5	2-796281-9	796281-6	25.5	36.5	83.5	10	2.90
3 x 1.35 34.5	3-796281-0	796281-7	31.5	42.5	85.0	10	4.00
3 x 1.35 42.5	3-796281-1	1-796281-1	39.7	52.5	96.0	10	6.00

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

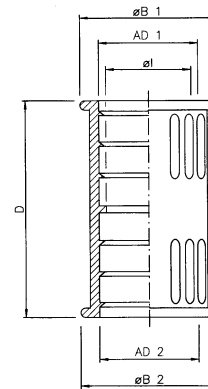
**Performance Characteristics**

Plastic Coupling.

**Material**

Plastic.

**RQK (IP 67)**



Trade Size*	RQK (Grey) Part Number	RQK (Black) Part Number	Smallest Inner-Ø Ø I	Outer-Ø Ø B	Length of Thread D	Packet/Pieces	Weight kg/100 p. Approx.
2 x <b>0.39</b> 10.0	2-796282-1	796282-8	7.0	17.5	33.5	10	0.25
2 x <b>0.51</b> 13.0	2-796282-2	796282-1	10.0	20.0	36.5	10	0.30
2 x <b>0.62</b> 15.8	2-796282-3	796282-2	12.5	23.0	44.5	10	0.50
2 x <b>0.72</b> 18.5	2-796282-4	796282-9	15.0	26.5	48.0	10	0.60
2 x <b>0.83</b> 21.2	2-796282-5	796282-3	18.0	29.5	46.0	10	0.80
2 x <b>1.12</b> 28.5	2-796282-6	796282-4	25.2	36.5	46.0	10	1.00
2 x <b>1.36</b> 34.5	2-796282-7	796282-5	31.5	42.5	48.0	10	1.50
2 x <b>1.67</b> 42.5	2-796282-8	796282-6	39.5	51.0	49.0	10	2.00
2 x <b>2.15</b> 54.5	2-796282-9	796282-7	51.5	63.0	54.5	10	2.70

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Electronics**

**Corrugated Plastic Tubing Connections (Continued)**

**Performance Characteristics**

One-piece plastic-Y- distributor for corrugated tubings.

**Construction**

Distributor case with 3 tubing connections as well as integrated snap-in sleeves and sealings.

**Material**

High-quality impact resistant plastic material (PA).  
Sealing: Santoprene®

**Easy to assemble**

Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions.

Smallest inner-Ø I ≥ tubing inside diameter.

**Protective system**

IP 67 acc. EN 60529

**Temperature range**

From approx. -30°C up to approx. +100°C.

**Application**

For expert assembly as protective insulating distributor suited acc. to the application rules of DIN EN 60204 in the machine and plant construction.

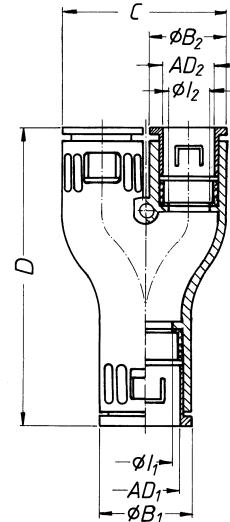
**Color**

Grey and black

**For tubing type**

Corrugated tubing, type: ROHRflex

RQY (IP 67)



Trade Size* Tubing Outer-Ø AD <sub>2</sub> /AD <sub>1</sub>	RQY (Grey) Part Number	RQY (Black) Part Number	Through-Passage		Outer-Ø		Total Length D	Total Width C	Packet/ Pieces	Weight kg/100 p. Approx.
			Ø I <sub>1</sub>	Ø I <sub>2</sub>	Ø B <sub>1</sub>	Ø B <sub>2</sub>				
<b>0.39/0.51</b> 2x10.0/1x13.0	969840-1	969839-1	10.0	7.0	20.0	17.0	63.0	36.0	10	1.60
<b>0.51</b> 3x13.0	969840-2	969839-2	10.0	10.0	20.0	20.0	65.0	43.0	10	1.80
<b>0.51/0.62</b> 2x13.0/1x15.8	969840-3	969839-3	12.5	10.0	23.0	20.0	66.0	45.0	10	2.00
<b>0.62</b> 3x15.8	969840-4	969839-4	12.5	12.5	23.0	23.0	68.0	46.0	10	2.20

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

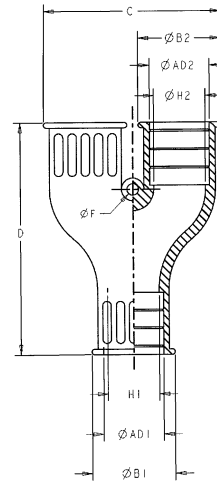
**Performance Characteristics**

Y Distributor, One Piece.

**Material**

TPE

**RQY (IP 67)**



Trade Size* Tubing Outer-Ø AD2/AD1	RQY (Grey) Part Number	RQY (Black) Part Number	Through- Passage		Outer-Ø		Total Length D	Total Width C	Ø F	Packet/ Pieces	Weight kg/100 p. Approx.
			Ø H1	Ø H2	Ø B1	Ø B2					
<b>0.39</b> 3x10.0	2-796550-1	796550-1	9.5	9.5	17.5	17.5	54.5	36.5	4	10	0.90
<b>0.62/0.83</b> 2x15.8/1x21.2	2-796550-2	796550-2	18.0	14.0	29.5	25.0	75.0	52.0	4	10	2.50
<b>0.62/1.12</b> 2x15.8/1x28.5	2-796550-3	796550-3	25.5	14.0	36.5	25.0	75.0	52.0	4	10	2.80
<b>0.73</b> 3x18.5	2-796550-4	796550-4	15.0	15.0	26.5	26.5	81.0	54.5	4	10	2.60
<b>0.83</b> 3x21.2	2-796550-5	796550-5	18.0	18.0	29.5	29.5	82.5	62.5	4	10	2.70
<b>0.83/1.12</b> 2x21.2/1x28.5	2-796550-6	796550-6	25.5	18.0	36.5	29.5	68.0	60.5	4	10	3.40
<b>1.12/1.35</b> 2x28.5/1x34.5	2-796550-7	796550-7	31.5	25.5	42.5	36.5	86.0	77.0	4	10	5.00
<b>1.35/1.67</b> 2x34.5/1x42.5	2-796550-8	796550-8	39.7	31.5	52.5	42.5	98.5	89.0	4	10	6.00
<b>1.67/2.14</b> 2x42.5/1x54.5	2-796550-9	796550-9	52.0	39.7	65.0	52.5	116.0	109.5	4	5	8.50

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



Flat-seal, to seal the connector body on the rigid steel conduit connecting thread acc. to DIN 40430, buna-N.

**Accessories**

**FR-P**



FR-P Part No.	PG	Inner (mm)	Outer (mm)	Height (mm)	Packet/Pieces	Weight kg/100 p. Case
796257-1	7	12.0	16.5	1.60	50	0.03
796257-2	9	15.0	19.0	1.60	50	0.05
796257-7	11	18.0	23.0	1.80	50	0.06
796257-3	13.5	19.5	25.0	1.80	50	0.07
796257-8	16	21.5	27.0	1.80	50	0.08
796257-9	21	27.5	34.0	2.20	25	0.13
796257-4	29	35.5	44.0	2.20	25	0.19
796257-5	36	46.5	55.5	2.70	25	0.27
796257-6	48	58.5	69.5	3.20	10	0.46

Flat-seal, to seal the connector body on the metric ISO connecting thread acc. to EN 60423, buna-N.

**FR-M**



FR-M Part No.	Metric	Inner (mm)	Outer (mm)	Height (mm)	Packet/Pieces	Weight kg/100 p. Case
796256-1	M10x1.0	10.0	17.0	1.60	50	0.03
796256-2	M12x1.5	12.0	20.0	1.60	50	0.05
796256-3	M16x1.5	16.0	23.0	1.80	50	0.06
796256-4	M20x1.5	20.0	29.0	1.80	50	0.07
796256-5	M25x1.5	25.0	37.0	1.80	50	0.08
796256-6	M32x1.5	32.0	44.0	2.20	25	0.13
796256-7	M40x1.5	40.0	52.0	2.10	25	0.19
796256-8	M50x1.5	50.0	64.0	2.70	25	0.27
796256-9	M63x1.5	63.0	68.0	3.20	10	0.46

Flat-seal, to seal the connector body on the UNEF-inner thread.

**Accessories** (Continued)

**FR-U**



FR-U Part No.	UNEF	NPT	CTG	Whitworth	Inner (mm)	Outer (mm)	Height (mm)	Packet/Pieces	Weight kg/100 p. Case
796258-1	1/2"	—	—	—	9.0	12.0	1.60	50	0.025
796258-2	5/8"	—	—	—	11.0	15.0	1.60	50	0.030
796258-3	3/4"	—	—	—	13.0	18.0	1.60	50	0.035
796258-4	7/8"	—	—	—	16.0	21.0	1.80	50	0.055
796256-3	1"	—	—	—	16.0	23.0	1.80	50	0.060
796256-4	1 3/16"	—	—	—	20.0	29.0	1.80	50	0.070
796257-9	1 3/8"	—	—	—	27.5	34.0	2.20	25	0.130
796258-5	1 7/16"	—	—	—	30.0	35.5	2.20	25	0.140
796258-6	1 3/4"	1"	G28	1"	34.0	43.0	2.20	25	0.190
796258-7	2"	—	—	—	40.0	49.0	2.20	25	0.230

Flat-seal, to seal the connector body on the NPT-Thread/CTG thread acc. to JIS B 0204 or Whitworth-thread acc. to DIN ISO 228-1.

**FR-N/C**



FR-N/C Part No.	NPT	CTG	Whitworth	Inner (mm)	Outer (mm)	Height (mm)	Packet/Pieces	Weight kg/100 p. Case
796255-1	1/4"	—	1/4"	14.0	17.0	1.60	50	0.03
796255-2	3/8"	—	3/8"	18.0	23.0	1.80	50	0.06
796255-3	1/2"	G16	1/2"	21.5	27.0	1.80	50	0.08
796255-4	3/4"	G22	3/4"	27.5	34.0	2.20	25	0.13
796258-6	1"	G28	1"	34.0	43.0	2.20	25	0.19
796255-6	1 1/4"	G36	1 1/4"	42.5	51.0	2.70	25	0.24
796255-7	1 1/2"	—	1 1/2"	48.5	55.0	2.70	25	0.27
796255-8	2"	G54	2"	60.5	66.0	3.20	10	0.42

O-ring to seal the connector body on the rigid steel conduit connecting thread acc. to DIN 40430.

**Accessories** (Continued)

**OR-P**



OR-P Part No.	PG Thread	Inner	Ring Thickness	Packet/Pieces	Weight kg/100 p. Case
796259-1	7	10.8	1.5	50	0.03
796259-2	9	12.5	1.8	50	0.05
796259-3	11	16.0	1.8	50	0.06
796259-4	13.5	18.0	1.8	50	0.07
796259-5	16	20.0	2.0	50	0.08
796259-6	21	26.0	2.0	25	0.13
796259-7	29	34.0	2.0	25	0.19
796259-8	36	44.0	2.5	25	0.27
796259-9	48	55.0	2.5	10	0.46

Counternut, nickel plated brass, rigid steel conduit connecting thread acc. to DIN 40430.

**GM-P**



GM-P Part No.	PG Thread	Wrench Size Across Flats	Thickness	Packet/Pieces	Weight kg/100 p. Case
796261-1	7	15.0	2.8	100	0.18
796261-2	9	18.0	2.8	100	0.24
796261-3	11	21.0	3.0	100	0.30
796261-4	13.5	23.0	3.0	100	0.35
796261-5	16	26.0	3.0	100	0.48
796261-6	21	32.0	3.5	100	0.80
796261-7	29	41.0	4.0	100	1.35
796261-8	36	51.0	5.0	50	2.14
796261-9	48	64.0	5.5	25	3.35

Counternut, nickel plated brass, metric ISO thread EN 60423.

**GM-M**



(Grey) Part No.	(Black) Part No.	Thread EN 60423	Wrench Size Across Flats	Thickness	Packet/Pieces	Weight kg/100 p. Case
2-796368-1	796368-1	M10 x 1.0	14.0	5.0	100	0.11
2-796368-2	796368-2	M12 x 1.5	17.0	5.0	100	0.12
2-796368-3	796368-3	M16 x 1.5	22.0	5.0	100	0.14
2-796368-4	796368-4	M20 x 1.5	26.0	6.0	100	0.21
2-796368-5	796368-5	M25 x 1.5	32.0	6.0	100	0.30
2-796368-6	796368-6	M32 x 1.5	41.0	7.0	100	0.57
2-796368-7	796368-7	M40 x 1.5	50.0	7.0	50	0.75
2-796368-8	796368-8	M50 x 1.5	60.0	8.0	25	1.21
2-796368-9	796368-9	M63 x 1.5	75.0	8.0	10	1.28

Counternut, plastic (PA), rigid steel conduit connecting thread acc. to DIN 40430.

**Accessories** (Continued)

**GMK-P**



GMK-P (Grey) Part No.	GMK-P (Black) Part No.	PG Thread	Wrench Size Across Flats	Thickness	Packet/Pieces	Weight kg/100 p. Case
796260-1	2-796260-1	7	19.0	5.0	100	0.12
796260-2	2-796260-2	9	22.0	5.0	100	0.13
796260-3	2-796260-3	11	24.0	5.0	100	0.14
796260-4	2-796260-4	13.5	27.0	6.0	100	0.19
796260-5	2-796260-5	16	30.0	6.0	100	0.25
796260-6	2-796260-6	21	36.0	7.0	100	0.34
796260-7	2-796260-7	29	46.0	7.0	100	0.51
796260-8	2-796260-8	36	60.0	8.0	50	1.16
796260-9	2-796260-9	48	70.0	8.0	25	1.28

Counternut, plastic (PA), NPT-Thread.

**GMK-N**



GMK-N Part No.	NPT	Wrench Size Across Flats	Thickness	Packet/Pieces	Weight kg/100 p. Case
796262-1	3/8"	24.0	5.0	100	0.20
796262-2	1/2"	27.0	6.0	100	0.24
796262-3	3/4"	30.0	6.0	100	0.30

Counternut, nickel plated brass, NPT-Thread.

**GM-N**



GM-N Part No.	NPT	Wrench Size Across Flats	Thickness	Packet/Pieces	Weight kg/100 p. Case
796473-1	3/8"	20.0	3.0	100	0.34
796473-2	1/2"	24.0	3.0	100	0.42
796473-3	3/4"	30.0	3.5	100	0.74
796473-4	1"	38.0	4.0	100	1.54
796473-5	1 1/4"	46.0	5.0	100	2.00
796473-6	1 1/2"	51.0	5.0	100	2.00
796473-7	2"	64.0	5.5	50	3.51

**Performance Characteristics**

End cap from tubing to cable made of plastic for tubings.

**Construction**

One-piece end cap as transition from tubing to cable resp. as final end of tubing. Fixed by inside circulating ribs when pushed on the tubing.

**Material**

High-quality plastic Santoprene® thermoplastic elastomers or plastic.

**Easy to assemble**

Assembled by just putting in tubing end.

**Protective System**

IP 67 acc. EN 60529

**Temperature range**

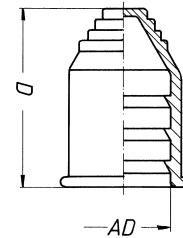
From approx. -40°C up to approx. +120°C, temporarily withstands temperatures up to approx. +150°C.

**Color**

Grey and black

**Accessories (Continued)**

**RQE (IP 67)**



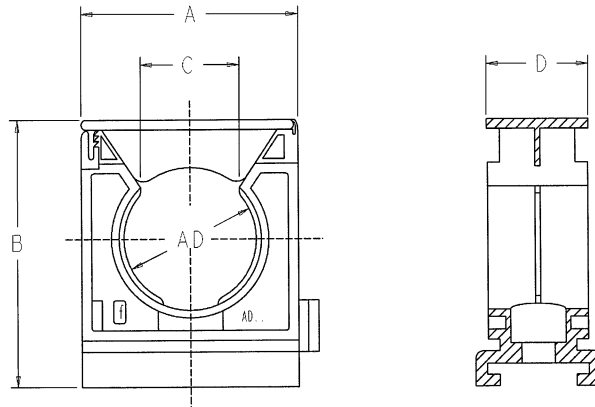
Trade Size** Tubing Outer Ø AD	RQE (Grey) Part No.	RQE (Black) Part No.	For Cable Cross Section Ø Min. - Ø Max.	Total Length D	Packet/ Pieces	Weight kg/ 100 p. Case
<b>0.39</b> 10.0	<b>5030012007*</b>	969847-1	1.0 - 8.0	29.0	50	0.20
<b>0.51</b> 13.0	969848-2	969847-2	1.0 - 10.0	32.5	50	0.30
<b>0.62</b> 15.8	969848-3	969847-3	4.0 - 12.0	36.5	50	0.40
<b>0.72</b> 18.5	<b>5030012013*</b>	<b>5030012213*</b>	4.0 - 13.0	37.5	50	0.50
<b>0.83</b> 21.2	969848-4	969847-4	6.0 - 16.5	37.5	50	0.60
<b>1.12</b> 28.5	969848-5	969847-5	6.0 - 23.0	40.2	25	0.75
<b>1.35</b> 34.5	969848-6	969847-6	6.0 - 29.0	44.2	25	0.90
<b>1.67</b> 42.5	<b>5030012036*</b>	<b>5030012236*</b>	10.0 - 37.0	46.0	25	1.20

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Accessories** (Continued)

**Tubing Clamp**



Trade Size* Tubing Outer Ø AD	(Grey) Part No.	(Black) Part No.	Dimension				Fastening Bore Hole Ø	Packet/ Pieces	Weight kg/ 100 p. Case
			A	B	C	D			
<b>0.39</b> 10.0	796372-1	796369-1	21.67	26.67	8.0	20.0	4.5	50	0.69
<b>0.51</b> 13.0	796372-2	796369-2	26.00	32.00	8.5	20.0	5.5	50	0.93
<b>0.62</b> 15.8	796372-3	796369-3	26.00	32.00	10.0	20.0	5.5	50	0.85
<b>0.70</b> 17.8	796372-4	796369-4	32.50	40.00	12.5	20.0	5.5	50	1.20
<b>0.72</b> 18.5	796372-5	796369-5	32.50	40.00	12.5	20.0	5.5	50	1.20
<b>0.83</b> 21.2	796372-6	796369-6	32.50	40.00	16.6	20.0	6.6	50	1.20
<b>0.86</b> 21.8	796372-7	796369-7	32.50	40.00	16.6	20.0	6.6	50	1.20
<b>1.12</b> 28.5	796372-8	796369-8	43.33	53.34	20.0	20.0	6.6	25	1.70
<b>1.35</b> 34.5	796372-9	796369-9	43.33	53.34	25.0	20.0	6.6	25	1.70
<b>1.67</b> 42.5	1-796372-0	1-796369-0	65.00	80.00	30.0	20.0	6.6	25	3.20
<b>2.14</b> 54.5	1-796372-1	1-796369-1	65.00	80.00	38.0	20.0	6.6	10	2.90

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



*Electronics*

**Application Tooling**

**Bell Fitting Driver**

Useful hand tool for inserting connectors into conduits or tubing.



Bell Fitting Driver Part Number	For Thread PG
1-241109-1	7 - 16
1-241109-2	21 - 48



**ROHRflex-Shears**

Special shears for cutting of **ROHRflex** corrugated plastic tubing on pages 6-9.



Trade Size* AD	ROHRflex-Shears Part Number	Cutting Wrench for Thread Size
<b>0.39-0.83</b> 10.0-21.2	969849-1	PG 7 - PG 16
<b>1.00-1.35</b> 25.5-34.5	969849-2	PG 21 - PG 29
<b>1.35</b> 34.5	969849-3	PG 29

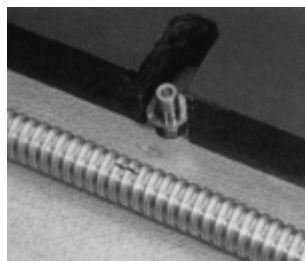
\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Mini Disc Saw (Customer Supplied)**

For cutting and trimming of protective metal conduits type SPR- or FLEXAgraff on pages 40-44.

**Disc Saw** — .5 to .6 [12 to 15] diameter, with carbide tipped teeth  
**Number of Teeth** — 25 on copper disc; 50 on steel disc  
**Disc Speed** — Approx. 40,000 rpm  
**Drive** — Pneumatic or electric

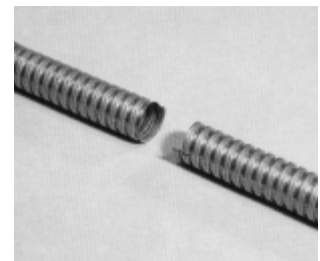
Disc saw and accessories available on request.



Cut longitudinally across two hose covering segments



Unscrew the coils



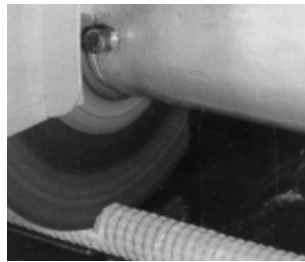
The result is a clean cut

*Electronics*

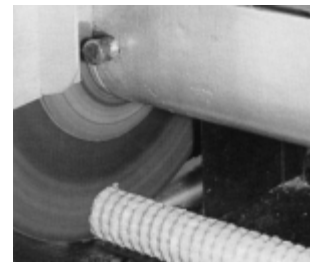
**Application Tooling** (Continued)

**Cutting Disc  
(Customer Supplied)**

For cutting of protective braided metal conduits on page 41.



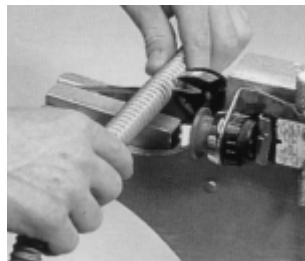
Position conduit below and at right-angle to the cutting disc.



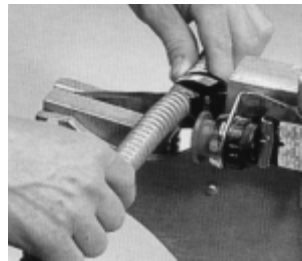
Lightly cut through the conduit for clean ends.

**Pneumatic Cutting Pliers  
(Customer Supplied)**

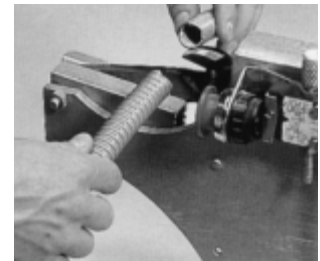
For cutting of protective plastic conduits with helix on page 45.



Cut into the plastic sheathing



Cut through the helix with pliers



The result is a clean and finished cut of the conduit

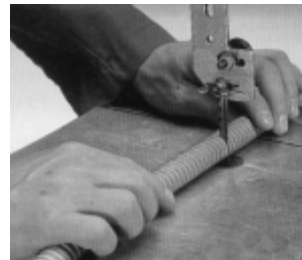
**Band Saw  
(Customer Supplied)**

For cutting and trimming of most types of conduits.

**Band Saw** — .16 to .2 [4 to 5] wide, .02 to .03 [0.6 to 0.8] thick, 24 teeth, used at a high cutting speed



Position conduit at right-angle to band saw



Lightly cut through conduit

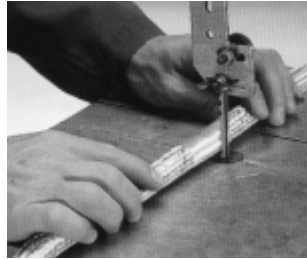


Conduit ends are clean and ready for use

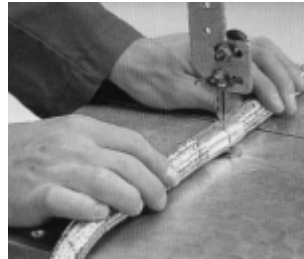
**Electronics****Application Tooling** (Continued)**Band Saw**  
(Customer Supplied)

(Continued)

For cutting of braided metal conduits on page 41.



Wrap conduit with metal adhesive tape two or three times at the cutting position.



Position conduit at right-angle to the band saw and lightly cut through the conduit.



Conduit ends should be clean without fraying, due to adhesive tape wrapping.

**Shears and Snips**  
(Customer Supplied)

For cutting of protective plastic conduits on page 45.



Cut through the plastic sheathing.



Bend the conduit and cut through the steel helix.

**Hand Saw**  
(Customer Supplied)

For small quantities, conduits can be easily cut with a hand saw. The result should be just as good as with a band saw.



Lightly and squarely cut through the conduit

**Protective Metal Conduits**

**Performance Characteristics**

Protective metal conduit, galvanized steel, round, profile: double-overlapped. VDE-reg.-no. 9375 (approved acc. to DIN VDE 57605, marking AS)

**Construction**

Strip wound flexible metallic conduit with double overlapped profile, round cross section.

**Material**

Cold strip St 2 acc. DIN 1624, galvanized, Fe/Zn 3, or rust proof steel.

**Properties**

Due to the double overlapped profile the conduit provides a high tensile and twisting strength and it better prevents untwisting of the conduit, very flexible, high shielding factor.

**Protective system**

IP 40 acc. EN 60529

**Temperature range**

Up to approx. +400°C

**Application**

Electrical installation conduit for installations requiring high stretching and twisting strain. A.o. protective conduit for oil ducts in the shipbuilding industry and for hydraulic and pneumatic conduits.

**Connections**

Appropriate FLEXA-conduit screw connections with rigid steel conduit connecting thread PG DIN 40430 and metric ISO thread acc. EN 60423, suitable for using in Ex-areas Zone 1 and 2 acc. VDE 0165. Especially suitable acc. to the specifications of EN 60204: Type US- and Type USW-.

**Delivery lengths**

25-50m depending on dimension, straightly measured.

Suitable for using in Ex-areas Zone 1 and 2 acc. VDE 0165.

**Related Product Data**

Application Tooling — Page 37

**FLEXA<sup>graft</sup>-AS (IP 40)**



Trade Size** Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	FLEXA <sup>graft</sup> Part Number	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*	Size in Ft.
0.39 10.0	8 x 10	969784-1	40	0.120	50m	164'
0.55 14.0	12 x 14	969784-2	45	0.130	50m	164'
0.67 17.0	14 x 17	969784-3	60	0.250	50m	164'
0.75 19.0	16 x 19	969784-4	63	0.280	50m	164'
0.83 21.0	18 x 21	969784-5	70	0.300	50m	164'
1.06 27.0	24 x 27	969784-6	90	0.390	50m	164'
1.42 36.0	31 x 36	969784-7	130	0.750	25m	82'
1.77 45.0	40 x 45	969784-8	170	0.950	25m	82'
2.20 56.0	51 x 56	969784-9	220	1.200	25m	82'

\*20 Rings of specified length.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Notes: 1. Ask for other dimensions.

2. For quantities less than minimums, contact Tyco Electronics.

**Protective Metal Conduits (Continued)**

**Performance Characteristics**

Protective metal conduit, galvanized steel, round, profile: double overlapped with CU-braiding for EMC protection up to 1000 MHz. The measurement of the coupling impedance acc. to DIN 47250 part 4 results in a minimum value of 227.6m Ω/m at 30 MHz. Acc. to DIN VDE 0245 the maximum coupling impedance amount to 250m Ω/m at 30 MHz.

**Construction**

Strip wound flexible metallic conduit with double-overlapped profile, round cross section, with copper wire braiding.

**Material**

1. Protective conduit: Cold strip ST 2 acc. DIN 1624, galvanized, Fe/Zn 3
2. Braiding: Copper, tinned

**Properties**

Due to its double-folded profile the conduit provides a high tensile and twisting strength, no untwisting of the conduit, extremely flexible. Shielding factor up to 10 MHz acc. VG95373, part 41 up to 30 db, up to 1000 MHz acc. VDE 0877, part 2.02/85 up to 30 db.

**Protective system**

IP 40 acc. EN 60529

**Temperature range**

Up to approx. +150°C

**Application**

Electrical installation conduit for installations requiring high stretching and twisting strain for EMC applications.

**Connections**

Appropriate FLEXA-conduit screw connections with rigid steel conduit connecting thread PG DIN 40430 and metric ISO thread EN 60423 for mounting suitable acc. to EMC specifications. **Note: Use brass thrust collar for EMC-safe mounting.** For EMC-usage take note of assembly instruction. Especially suitable acc. to the specifications of EN 60204: Type US- and Type USW-.

**Delivery lengths**

Full meter pieces beginning with 1 meter, straightly measured. Fixed lengths are being FLEXA-mounted with connecting elements acc. to EMC specifications. Note: To lessen noise the conduit can be braided several times.

Suitable for using in Ex-areas Zone 1 and 2 acc. VDE 0165.

**Related Product Data**

Application Tooling — Pages 37-39

**FLEXA<sup>graff</sup>-CU (IP 40)**



Trade Size** Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	FLEXA <sup>graff</sup> Part Number	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*
0.39 10.0	7 x 10	969785-1	44	0.130	50
0.55 14.0	11 x 14	969785-2	50	0.164	50
0.67 17.0	13 x 17	969785-3	67	0.290	50
0.75 19.0	15 x 19	969785-4	70	0.330	50
0.83 21.0	17 x 21	969785-5	78	0.350	50
1.06 27.0	23 x 27	969785-6	100	0.460	50
1.42 36.0	29 x 36	969785-7	150	0.860	25
1.77 45.0	38 x 45	969785-8	190	1.100	25
2.20 56.0	49 x 56	969785-9	240	1.420	25

\*20 Rings of specified length.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

- Notes:**
1. Full meter pieces beginning with 1 meter as fixed lengths deliverable.
  2. For quantities less than minimums, contact Tyco Electronics.

**Protective Metal Conduits Liquid Tight**

**Performance Characteristics**

Protective metal conduit, galvanized steel, round profile: double overlapped with oil resistant polyurethane sheathing VDE Reg.-No. 9967 (approved acc. to DIN VDE 57605, marking AS)

**Construction**

Strip wound flexible metallic conduit with double overlapped profile, round cross section, with high-grade PU sheathing.

**Material**

1. Protective conduit: Cold strip St 2 acc. DIN 1624, galvanized, Fe/Zn3.
2. Sheathing: Polyurethane (PU)

**Properties**

Due to the double overlapped profile the conduit provides a high tensile and twisting strength, oil-, benzene-, and grease resistant, widely resistant to solvents acids, free of halogen, silicon and cadmium, outstanding qualities at low temperatures, no untwisting of the conduit, very flexible, high shielding, microbic resistant, flame resistant acc. to UL94V-0.

**Protective system**

IP 68 acc. EN 60529

**Temperature range**

From approx. -40°C up to +100°C

**Application**

Electrical installation conduit for installations requiring high stretching and twisting strain as well as liquid-tight installations which have to be protected against oil, grease and benzene at high temperatures.

**Connections**

Appropriate FLEXA-conduit screw connections with rigid steel conduit connecting thread PG DIN 40430 and metric ISO thread EN 60423. Especially suitable acc. to the specifications of EN 60204: Type US- and Type USW-.

**Color**

Metallic Blue

**Delivery lengths**

10, 25 and 50m depending on dimension, straightly measured.

**Related Product Data**

Application Tooling — Page 37

**FLEXA<sup>graff</sup>-PU-AS (IP 68)**



Trade Size** Hose Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	FLEXA <sup>graff</sup> - PU-AS Part Number	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*	Ring Size in Ft.
<b>0.39</b> 10.0	7 x 10	969786-1	44	0.130	50m	164'
<b>0.55</b> 14.0	11 x 14	969786-2	50	0.164	50m	164'
<b>0.67</b> 17.0	13 x 17	969786-3	67	0.290	50m	164'
<b>0.75</b> 19.0	15 x 19	969786-4	70	0.330	50m	164'
<b>0.83</b> 21.0	17 x 21	969786-5	78	0.350	50m	164'
<b>1.06</b> 27.0	23 x 27	969786-6	100	0.460	50m	164'
<b>1.42</b> 36.0	29 x 36	969786-7	150	0.860	25m	82'
<b>1.77</b> 45.0	38 x 45	969786-8	190	1.100	25m	82'
<b>2.20</b> 56.0	49 x 56	969786-9	240	1.420	25m	82'

\*20 Rings of specified length.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Note: For quantities less than minimums, contact Tyco Electronics.

Trade Size** Hose Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	FLEXA <sup>graff</sup> - PU-AS Part Number	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*	Ring Size in Ft.
<b>0.39</b> 10.0	7 x 10	1-969786-0	44	0.130	10m	32'9
<b>0.55</b> 14.0	11 x 14	1-969786-1	50	0.164	10m	32'9
<b>0.67</b> 17.0	13 x 17	1-969786-2	67	0.290	10m	32'9
<b>0.75</b> 19.0	15 x 19	1-969786-3	70	0.330	10m	32'9
<b>0.83</b> 21.0	17 x 21	1-969786-4	78	0.350	10m	32'9
<b>1.06</b> 27.0	23 x 27	1-969786-5	100	0.460	10m	32'9
<b>1.42</b> 36.0	29 x 36	1-969786-6	150	0.860	10m	32'9
<b>1.77</b> 45.0	38 x 45	1-969786-7	190	1.100	10m	32'9
<b>2.20</b> 56.0	49 x 56	1-969786-8	240	1.420	10m	32'9

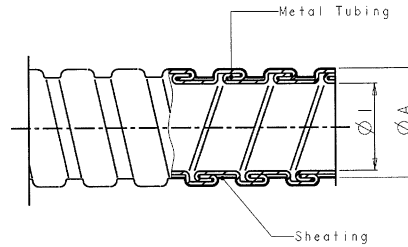
\*20 Rings of specified length.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Note: For quantities less than minimums, contact Tyco Electronics.

**Protective Metal Conduits Liquid Tight (Continued)**

**FLEXA<sup>graff</sup>-ME-ASF**



Trade Size* Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	FLEXA <sup>graff</sup> - ME-ASF Part Number	Bending Radius mm	Weight kg/m	Minimum Package Size
<b>0.39</b> 10.0	7 x 10	969787-1	44	0.130	50m
<b>0.55</b> 14.0	11 x 14	969787-2	50	0.164	50m
<b>0.67</b> 17.0	13 x 17	969787-3	67	0.300	50m
<b>0.75</b> 19.0	15 x 19	969787-4	70	0.330	50m
<b>0.83</b> 21.0	17 x 21	969787-5	78	0.350	50m
<b>1.06</b> 27.0	23 x 27	969787-6	100	0.460	50m
<b>1.42</b> 36.0	29 x 36	969787-7	150	0.860	25m
<b>1.77</b> 45.0	38 x 45	969787-8	190	1.100	25m
<b>2.20</b> 56.0	49 x 56	969787-9	240	1.420	25m

**\*Advice:** For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).  
**Note:** For quantities less than minimums, contact Tyco Electronics.



**Protective Metal Conduits Liquid Tight (Continued)**

**Performance Characteristics**

Protective metal conduit, galvanized steel, round, with flame-resistant sheathing, non corrosive, low toxicity, low smoke gas density. Electrical installation conduit for heavy mechanical stresses, DIN 49012, structural shape H, approved according to DIN VDE 57605.

**Construction**

Strip wound flexible metallic conduit with hooked profile, round cross section, polygonal profile, with flame-resistant Megolon® sheathing.

**Material**

1. Protective conduit: Cold strip DC 03 acc. EN 10139, galvanized, Fe/Zn 3.
2. Sheathing: Flame-resistant Megolon® flame-resistant sheathing.

**Properties**

Good tensile strength, withstands cross-pressure, halogen-, silicone- and cadmium free, ozone and UV resistant, hardly inflammable, self-extinguishing, low smoke gas evolution.

**Protective system:**

IP 68 acc. EN 60529

**Temperature range**

From approx. -15°C up to approx. +80°C

**Application**

Electrical installation conduit for liquid-tight installations in fire risked areas as protection against fire effects, like corrosiveness, toxicity and smoke gas evolution.

**Connections**

Appropriate FLEXA-conduit screw connections with rigid steel conduit connecting thread PG DIN 40430 and metric ISO thread EN 60423 see conduit screw connections. Especially suitable acc. to the specifications of EN 60204: Type US- and Type USW-.

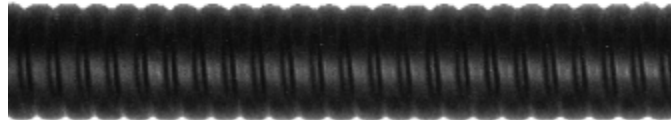
**Color**

Black

**Delivery lengths**

25 m and 50 m depending on dimension, straightly measured. Fixed lengths deliverable, cutting costs as per price list.

**SPR-ME-ASF (IP 68)**



Trade Size*** Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	SPR-ME-ASF Part Number	Minimum Quantity m	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size²	Size in Ft.
0.39 10.0	7 x 10	2012412007**	500	36	0.085	50m	164'
0.55 14.0	10 x 14	2012412010**	500	44	0.135	50m	164'
0.67 17.0	13 x 17	2012412013**	500	50	0.170	50m	164'
0.75 19.0	15 x 19	2012412015**	500	58	0.200	50m	164'
0.83 21.0	17 x 21	2012412017**	500	64	0.220	50m	164'
1.06 27.0	22 x 27	2012412022**	250	80	0.340	50m	164'
1.42 36.0	29 x 36	2012412029**	250	108	0.620	25m	82'
1.77 45.0	38 x 45	2012412038**	250	130	0.820	25m	82'
2.20 56.0	49 x 56	2012412049**	250	155	0.970	25m	82'

\*20 Rings of specified length.

\*\*Part No. on inquiry

\*\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Note: For quantities less than minimums, contact Tyco Electronics.

**Protective Plastic Conduits**

**Performance Characteristics**

Protective plastic conduit with inside helix of PVC-sheathed spring steel wire, with oil resistant polyurethane jacket.

**Construction**

Helical coiled corrugated plastic conduit with inside helix of plastic-sheathed spring steel wire and fixed high-grade plastic PU jacket.

**Material**

High-quality Polyurethane (PU). Inside helix from plastic-sheathed spring steel wire.

**Properties**

Extremely flexible, highly expandable and upsettable, air- and liquid-tight, high tenacity and abrasion resistance. Inside protection against corrosion from sheathed spring steel wire. Oil-, benzene- and grease resistant, widely resistant to solvents acids, free of halogen, silicon and cadmium, microbic resistant, outstanding qualities at low temperatures, flame resistant, UL94V-0.

**Protective system**

IP 68 acc. EN 60529

**Temperature range**

From approx. -40°C up to +100°C

**Application**

Suitable for highly flexible and liquid-tight installations which have to be better protected against oil, grease and benzene at high temperatures.

**Connections**

Appropriate FLEXA-conduit screw connections with rigid steel conduit connecting thread PG DIN 40430 and metric ISO thread EN 60423. Especially suitable acc. to the specifications of EN 60204: Type USK-, LKI-, LKID-, LKIW-F and LKIW- acc. to the required protective system.

**Color**

Metallic blue.  
Special colors on inquiry.

**Delivery lengths**

10, 25 and 50m depending on dimension, straightly measured by its own weight.

**Related Product Data**

Application Tooling — Page 37 and 39

**AIRflex-KUW-PU (IP 68)**



Trade Size** Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	AIRflex KUW-PU Part Number	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*	Size in Ft.
<b>0.39</b> 10.0	7 x 10	969788-1	8	0.070	50m	164'
<b>0.55</b> 14.0	10 x 14	969788-2	10	0.085	50m	164'
<b>0.67</b> 17.0	13 x 17	969788-3	13	0.130	50m	164'
<b>0.75</b> 19.0	15 x 19	969788-4	15	0.150	50m	164'
<b>0.83</b> 21.0	16 x 21	969788-5	17	0.210	50m	164'
<b>1.06</b> 27.0	22 x 27	969788-6	20	0.290	50m	164'
<b>1.42</b> 36.0	29 x 36	969788-7	25	0.440	25m	82'
<b>1.77</b> 45.0	38 x 45	969788-8	36	0.542	25m	82'
<b>2.20</b> 56.0	48 x 56	969788-9	40	0.875	25m	82'

\*20 Rings of specified length.

**\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).**  
**Note:** For quantities less than minimums, contact Tyco Electronics.

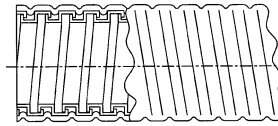
Trade Size** Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	AIRflex KUW-PU Part Number	Bending Radius mm ±10%	Weight kg/m ±10%	Minimum Package Size*	Size in Ft.
<b>0.39</b> 10.0	7 x 10	1-969788-0	8	0.070	10m	32'9
<b>0.55</b> 14.0	10 x 14	1-969788-1	10	0.085	10m	32'9
<b>0.67</b> 17.0	13 x 17	1-969788-2	13	0.130	10m	32'9
<b>0.75</b> 19.0	15 x 19	1-969788-3	15	0.150	10m	32'9
<b>0.83</b> 21.0	16 x 21	1-969788-4	17	0.210	10m	32'9
<b>1.06</b> 27.0	22 x 27	1-969788-5	20	0.290	10m	32'9
<b>1.42</b> 36.0	29 x 36	1-969788-6	25	0.440	10m	32'9
<b>1.77</b> 45.0	38 x 45	1-969788-7	36	0.542	10m	32'9
<b>2.20</b> 56.0	48 x 56	1-969788-8	40	0.875	10m	32'9

\*20 Rings of specified length.

**\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).**  
**Note:** For quantities less than minimums, contact Tyco Electronics.

**Protective Metal Conduit, with PVC Sheathing**

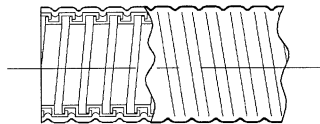
**SPR-PVC-AS**



Trade Size* Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	Part Number	Bending Radius mm	Approx. Weight kg/m	Delivery Length
<b>0.39</b> 10.0	7 x 10	796402-1	32	0.085	50m
<b>0.55</b> 14.0	10 x 14	796402-2	40	0.135	50m
<b>0.67</b> 17.0	13 x 17	796402-3	45	0.170	50m
<b>0.75</b> 19.0	15 x 19	796402-4	52	0.200	50m
<b>0.83</b> 21.0	17 x 21	796402-5	58	0.220	50m
<b>1.06</b> 27.0	22 x 27	796402-6	72	0.340	50m
<b>1.42</b> 36.0	29 x 36	796402-7	98	0.620	25m
<b>1.77</b> 45.0	38 x 45	796402-8	118	0.820	25m
<b>2.20</b> 56.0	49 x 56	796402-9	140	0.970	25m

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**SPR-EDU-AS**



Trade Size* Conduit Outer-Ø AD	Dimension Inner-Ø x Outer-Ø mm Approx.	Part Number	Bending Radius mm	Weight kg/m ±10%	Delivery Length
<b>0.39</b> 10.0	7 x 10	796541-1	28	0.110	50m
<b>0.55</b> 14.0	10 x 14	796541-2	34	0.180	50m
<b>0.67</b> 17.0	13 x 17	796541-3	40	0.230	50m
<b>0.75</b> 19.0	15 x 19	796541-4	45	0.260	50m
<b>0.83</b> 21.0	17 x 21	796541-5	50	0.300	50m
<b>1.06</b> 27.0	22 x 27	796541-6	63	0.510	50m
<b>1.42</b> 36.0	29 x 36	796541-7	85	0.750	25m
<b>1.77</b> 45.0	38 x 44	796541-8	100	1.000	25m
<b>2.20</b> 56.0	49 x 56	796541-9	135	1.350	25m

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Electronics**

**Connections with Ferrules**

**Performance Characteristics**

Multipart safety type screwed conduit connection with integrated ferrule and with PG thread, acc. DIN 40430 for all strip wound conduit types.

**Construction**

Connector body with hexagon wrench surface, fixed rigid steel conduit connecting thread DIN 40430, hexagon pressure nut, sealing of plastic, to receive FLEXA ferrules of metal and plastic.

**Material**

Connector Body: nickel-plated brass. Hexagon pressure nut: nickel-plated brass. Sealing ring: Thermoplastic elastomer, or TEFLON. Ferrule: Polished brass or plastic depending on conduit type.

**Properties**

Security conduit fitting with high water- and dustproof and friction-type locking

**US-P (IP 40 – IP 66)**



of conduit and screw connection, correct grounding, covering of the conduit ends, vibration and tension-proof, in combination with the right protective conduit.

**Protective system**

From IP 40 to IP 66 acc. EN 60529 in combination with the right protective conduit.

**Temperature range**

From approx. -40°C up to approx. +125°C with sealing of thermoplastic elastomer. From approx. -60°C up to approx. +300°C with sealing of TEFLON, especially in combination with FLEXA<sup>graff</sup>-SI-ASF. From approx. -40°C up to approx. +250°C with thrust collar of brass, especially in combination with FLEXA<sup>graff</sup>-CU (EMC-protection).

**Application**

Optimum protective conduit fitting, appropriate according to the specifications EN 60204 applicable to all areas of machine and installation construction.

**Suitable for conduit types**

For all protective conduit types except types of the LIQUID TIGHT-EF, -UL, -CSA.

PG	Trade Size*** AD	For Type: SPR-AS			For Types: SPR-PVC-AS/ SPR-PU-AS, SPR-EDU-AS, SPR-ME-ASF/SPR-CU-AS**			For Type: FLEXA <sup>graff</sup> -AS			Packet/ Pieces	Weight kg/ 100 p. Approx.
		Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number		
7	0.39 10.0	8 x 10	0.25 6.5	969794-1	7 x 10	0.23 6.0	969795-1	8 x 10	0.25 6.5	969794-1	50	1.68
9	0.55 14.0	11 x 14	0.39 10.0	969795-2	10 x 14	0.33 8.5	969795-2	12 x 14	0.41 10.5	969794-2	50	3.16
11	0.67 17.0	14 x 17	0.49 12.5	969794-3	13 x 17	0.45 11.5	969795-3	14 x 17	0.49 12.5	969794-3	50	4.14
13.5	0.75 19.0	16 x 19	0.57 14.5	969794-4	15 x 19	0.53 13.5	969795-4	16 x 19	0.57 14.5	969794-4	50	4.70
16	0.83 21.0	18 x 21	0.64 16.5	969794-5	17 x 21	0.61 15.5	969795-5	18 x 21	0.64 16.5	969794-5	50	5.38
21	1.06 27.0	23 x 27	0.84 21.5	969794-6	22 x 27	0.80 20.5	5010128021*	24 x 27	0.88 22.5	969794-6	25	10.00
29	1.42 36.0	31 x 36	1.16 29.5	969794-7	29 x 36	1.08 27.5	969795-7	31 x 36	1.16 29.5	969794-7	25	11.15
36	1.77 45.0	40 x 45	1.49 38.0	969794-8	38 x 45	1.43 36.5	969795-8	40 x 45	1.49 38.0	969794-8	20	18.18
48	2.20 56.0	51 x 56	1.92 49.0	969794-9	49 x 56	1.87 47.5	969795-9	51 x 56	1.92 49.0	969794-9	10	23.60

\*Part No. on inquiry

\*\*SPR-CU-AS and AIRflex-KUW-CU only with MSD for EMC-usage. Part No. on inquiry

\*\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Connections with Ferrules (Continued)**

**Material**

Polished brass or plastic depending on hose type.

**US-P**

(IP 40 – IP 66) (Continued)



Trade Size** AD	For Type: FLEXA <sub>graff</sub> -PU-AS, FLEXA <sub>graff</sub> -ME-ASF			For Types: SPR-PVC-EDU-AS, SPR-EDU-PVC			For Type: AIR <sub>flex</sub> -KUW-EDU AIR <sub>flex</sub> -KUW-CU*			Packet/ Pieces	Weight kg/ 100 p. Approx.
	Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7 x 10	0.23 6.0	969795-1	—	—	—	—	—	—	50	1.68
0.55 14.0	11 x 14	0.39 10.0	969795-2	9 x 14	0.33 8.5	969795-2	9 x 14	0.33 8.5	969795-2	50	3.16
0.67 17.0	13 x 17	0.45 11.5	969795-3	12 x 17	0.43 11.0	5010135011*	12 x 17	0.43 11.0	5010135011*	50	4.14
0.75 19.0	15 x 19	0.53 13.5	969795-4	14 x 19	0.51 13.0	5010135013*	14 x 19	0.51 13.0	5010135013*	50	4.70
0.83 21.0	17 x 21	0.61 15.5	969795-5	16 x 21	0.57 14.5	5010135016*	15 x 21	0.57 14.5	5010135016*	50	5.38
1.06 27.0	23 x 27	0.84 21.5	969795-6	21 x 27	0.76 19.5	5010601021*	20 x 27	0.76 19.5	5010135021*	25	10.00
1.42 36.0	29 x 36	1.08 27.5	969795-7	28 x 36	1.08 27.5	969795-7	28 x 36	1.08 27.5	969795-7	25	11.15
1.77 45.0	38 x 45	1.43 36.5	969795-8	37 x 45	1.39 35.5	5010135036*	37 x 45	1.39 35.5	5010135036*	20	18.18
2.20 56.0	49 x 56	1.87 47.5	969795-9	48 x 56	1.85 47.0	5010135048*	48 x 56	1.85 47.0	5010135048*	10	23.60

\*Part No. on inquiry

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Trade Size* AD	For Types: AIR <sub>flex</sub> -KUW, AIR <sub>flex</sub> -KUW-PU, AIR <sub>flex</sub> -GRS, AIR <sub>flex</sub> -K			Packet/ Pieces	Weight kg/ 100 p. Approx.
	Conduit Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7 x 10	0.23 6.0	969797-1	50	1.54
0.55 14.0	10 x 14	0.35 9.0	969797-2	50	2.85
0.67 17.0	13 x 17	0.45 11.5	969797-3	50	3.79
0.75 19.0	15 x 19	0.51 13.0	969797-4	50	4.31
0.83 21.0	16 x 21	0.57 14.5	969797-5	50	4.93
1.06 27.0	21 x 27	0.76 19.5	969797-6	25	9.21
1.42 36.0	29 x 36	1.04 26.5	969797-7	25	10.01
1.77 45.0	38 x 45	1.41 36.0	969797-8	20	16.82
2.20 56.0	48 x 56	1.79 45.5	969797-9	10	21.85

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Connections with Ferrules** (Continued)

**Material**

Polished brass or plastic depending on hose type.

**US-P**

(IP 40 – IP 66) (Continued)



Trade Size***	Thread DIN 40430 PG	For Type: FLEXA <sup>graff</sup> -SI-ASF			For Types: FLEXA <sup>graff</sup> -CU mit MSD (EMV) FLEXA <sup>graff</sup> -CU-PVC mit MSD (EMV)**			For Type: K-EDU			Packet/ Piece	Wt. kg/ 100 p. Approx.
		Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7	6 x 10	0.19 5.0	5010137007*	7 x 10	0.23 6.0	969796-1	6 x 10	0.23 6.0	5010132007*	50	1.68
0.55 14.0	9	10 x 14	0.43 11.0	5010137009*	11 x 14	0.39 10.0	969796-2	9 x 14	0.33 8.5	5010132009*	50	3.16
0.67 17.0	11	12 x 17	0.41 10.5	5010137011*	13 x 17	0.45 11.5	969796-3	12 x 17	0.45 11.5	5010132011*	50	4.14
0.75 19.0	13.5	14 x 19	0.49 12.5	5010137013*	15 x 19	0.53 13.5	969796-4	14 x 19	0.53 13.5	5010132013*	50	4.70
0.83 21.0	16	16 x 21	0.57 14.5	5010137016*	17 x 21	0.61 15.5	969796-5	16 x 21	0.61 15.5	5010132016*	50	5.38
1.06 27.0	21	21 x 27	0.76 19.5	5010137021*	23 x 27	0.84 21.5	969796-6	21 x 27	0.80 20.5	5010132021*	25	10.00
1.42 36.0	29	27 x 36	1.04 26.5	5010137029*	29 x 36	1.08 27.5	969796-7	28 x 36	1.08 27.5	5010132029*	25	11.15
1.77 45.0	36	36 x 45	1.35 34.5	5010137036*	38 x 45	1.43 36.5	969796-8	37 x 45	1.45 37.0	5010132036*	20	18.18
2.20 56.0	48	47 x 56	1.79 45.5	5010137048*	49 x 56	1.87 47.5	969796-9	48 x 56	1.88 48.0	5010132048*	10	23.60

\*Part No. on inquiry.

\*\*For liquid tight version a special type is necessary.

\*\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Electronics**

**Connections with Ferrules (Continued)**

**Performance Characteristics**

Multipart safety-type angle screwed conduit connection with integrated ferrule and with PG-thread DIN 40430 for all strip wound conduit types.

**Construction**

Round connector body in angle version of 90°, fixed rigid steel conduit connecting thread DIN 40430, hexagon pressure nut, sealing ring of plastic, to receive all FLEXA versions of ferrules of metal and plastic.

**Material**

Connector body: zinc die-casting. Hexagon pressure nut: nickel-plated brass. Sealing ring: Thermoplastic elastomer, or TEFLON. Ferrule: polished brass or plastic, depending on conduit type.

**Properties:**

Security conduit fitting with high water- and dustproof and friction-type

**USW-P (IP 40 – IP 66)**



locking of conduit and screw connection, correct grounding, covering of the conduit ends, vibration and tension-proof, in combination with the appropriate protective conduit.

**Protective system**

From IP 40 to IP 66 acc. EN 60529 in combination with the corresponding protective conduit.

**Temperature range**

From approx. -40°C up to approx. +125°C with sealing of thermoplastic elastomer. From approx. -60°C up to approx. +300°C with sealing of TEFLON, especially in combination with FLEXA<sup>graff</sup>-SI-ASF. From approx. -40°C up to approx. +250°C with thrust collar of brass, especially in combination with FLEXA<sup>graff</sup>-CU (EMC-protection).

**Application**

Optimum protective conduit fitting, appropriate according to the specifications EN 60204 in all areas of machine and installation construction.

**For conduit types**

For all protective conduit types except types of the LIQUID TIGHT-EF, -UL and -CSA.

Trade Size** AD	Thread DIN 40430 PG	For Type: SPR-AS			For Types: SPR-PVC-AS/ SPR-PU-AS, SPR-EDU-AS, SPR-ME-ASF/ SPR-CU-AS**			For Type: FLEXA <sup>graff</sup> -AS			Packet/Pieces	Weight kg/100 p. Approx
		Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7	8 x 10	0.25 6.5	969798-1	7 x 10	0.23 6.0	969799-1	8 x 10	0.25 6.5	969798-1	25	2.80
0.55 14.0	9	11 x 14	0.39 10.0	969799-2	10 x 14	0.33 8.5	5010228009*	12 x 14	0.41 10.5	969798-2	25	3.90
0.67 17.0	11	14 x 17	0.49 12.5	969798-3	13 x 17	0.45 11.5	969799-3	14 x 17	0.49 12.5	969798-3	25	5.90
0.75 19.0	13.5	16 x 19	0.57 14.5	969798-4	15 x 19	0.53 13.5	969799-4	16 x 19	0.57 14.5	969798-4	25	7.70
0.83 21.0	16	18 x 21	0.64 16.5	969798-5	17 x 21	0.61 15.5	969799-5	18 x 21	0.64 16.5	969798-5	25	9.80
1.06 27.0	21	23 x 27	0.84 21.5	969798-6	22 x 27	0.80 20.5	5010228021*	24 x 27	0.88 22.5	969798-6	10	13.10
1.42 36.0	29	31 x 36	1.16 29.5	969798-7	29 x 36	1.08 27.5	969799-7	31 x 36	1.16 29.5	969798-7	10	23.30

\*Part No. on inquiry.

\*\*SPR-CU-AS and AIR<sup>flex</sup>-KUW-CU only with MSD for EMC-usage.

\*\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

Trade Size** AD	Thread DIN 40430 PG	For Types: FLEXA <sup>graff</sup> -PU-AS, FLEXA <sup>graff</sup> -ME-ASF			For Types: SPR-PVC-EDU-AS, SPR-EDU-PVC			For Types: AIR <sup>flex</sup> -KUW-EDU AIR <sup>flex</sup> -KUW-CU*			Packet/Pieces	Weight kg/100p. Approx.
		Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number	Conduit Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7	7 x 10	0.23 6.0	969799-1	—	—	—	—	—	—	25	2.80
0.55 14.0	9	11 x 14	0.39 10.0	969799-2	9 x 14	0.33 8.5	5010228009*	9 x 14	0.33 8.5	5010228009*	25	3.90
0.67 17.0	11	13 x 17	0.45 11.5	969799-3	12 x 17	0.43 11.0	5010235011*	12 x 17	0.43 11.0	5010235011*	25	5.90
0.75 19.0	13.5	15 x 19	0.53 13.5	969799-4	14 x 19	0.51 13.0	5010235013*	14 x 19	0.51 13.0	5010235013*	25	7.70
0.83 21.0	16	17 x 21	0.61 15.5	969799-5	16 x 21	0.57 14.5	5010235016*	15 x 21	0.57 14.5	5010235016*	25	9.80
1.06 27.0	21	23 x 27	0.84 21.5	969799-6	21 x 27	0.76 19.5	5010201021*	20 x 27	0.76 19.5	5010235021*	10	13.10
1.42 36.0	29	29 x 36	1.08 27.5	969799-7	28 x 36	1.08 27.5	969799-7	28 x 36	1.08 27.5	969799-7	10	23.30

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Connections with Ferrules** (Continued)

**Material**

Polished brass or plastic depending on conduit type.

**USW-P**

(IP 40 – IP 66) (Continued)



Trade Size* AD	Thread DIN 40430 PG	For Types: AIR <sup>flex</sup> -KUW/ AIR <sup>flex</sup> -KUW-PU, AIR <sup>flex</sup> -GRS, AIR <sup>flex</sup> -K			Packet/Pieces	Weight kg/100 p. Approx.
		Conduit Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7	7 x 10	0.23 6.0	969801-1	25	2.60
0.55 14.0	9	10 x 14	0.35 9.0	969801-2	25	3.60
0.67 17.0	11	13 x 17	0.45 11.5	969801-3	25	5.70
0.75 19.0	13.5	15 x 19	0.51 13.0	969801-4	25	7.50
0.83 21.0	16	16 x 21	0.57 14.5	969801-5	25	9.60
1.06 27.0	21	21 x 27	0.76 19.5	969801-6	10	12.30
1.42 36.0	29	29 x 36	1.04 26.5	969801-7	10	22.10

\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



Trade Size** AD	Thread DIN 40430 PG	For Type: FLEXA <sup>graff</sup> -SI-ASF			For Type: FLEXA <sup>graff</sup> -CU mit MSD (EMV)			For Type: K-EDU			Packets/Pieces	Weight kg/100 p. Approx.
		Hose Dim.	Smallest Inner-Ø	Part Number	Hose Dim.	Smallest Inner-Ø	Part Number	Hose Dim.	Smallest Inner-Ø	Part Number		
0.39 10.0	7	6 x 10	0.19 5.0	5010237007*	7 x 10	0.23 6.0	969800-1	6 x 10	0.23 6.0	5010232007*	25	2.80
0.55 14.0	9	10 x 14	0.43 11.0	5010237009*	11 x 14	0.39 10.0	969800-2	9 x 14	0.33 8.5	5010232009*	25	3.90
0.67 17.0	11	12 x 17	0.41 10.5	5010237011*	13 x 17	0.45 11.5	969800-3	12 x 17	0.45 11.5	5010232011*	25	5.90
0.75 19.0	13.5	14 x 19	0.49 12.5	5010237013*	15 x 19	0.53 13.5	969800-4	14 x 19	0.53 13.5	5010232013*	25	7.70
0.83 21.0	16	16 x 21	0.57 14.5	5010235016*	17 x 21	0.61 15.5	969800-5	16 x 21	0.61 15.5	5010232016*	25	9.80
1.06 27.0	21	21 x 27	0.76 19.5	5010201021*	23 x 27	0.84 21.5	969800-6	21 x 27	0.80 20.5	5010232021*	10	13.10
1.42 36.0	29	27 x 36	1.04 26.5	5010237029*	29 x 36	1.08 27.5	969800-7	28 x 36	1.08 27.5	5010232029*	10	23.30

\*Part No. on inquiry.

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).



*Electronics*

**Connections with Ferrules** (Continued)

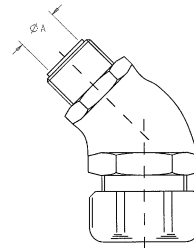
**Performance Characteristics**

Conduit Connection, Screwed, 45°.

**Material**

Connector Body, Pressure Nut & Ferrule: Galvanized Steel.  
Sealing Ring: Elastic Plastic.

**EW 45-P**



Trade Size* AD	Thread DIN 40430 PG	Conduit Dim.	Smallest Inner-Ø	Part Number	Packet/ Pieces
<b>0.38</b> 9.5	11	12.5 x 18	<b>0.43</b> 11.0	796314-1	25
<b>0.38</b> 9.5	13.5	12.5 x 18	<b>0.43</b> 11.0	796314-2	25
<b>0.50</b> 12.7	16	16 x 21	<b>0.57</b> 14.5	796314-3	25
<b>0.75</b> 19.1	21	21 x 26.5	<b>0.77</b> 19.5	796314-4	10
<b>1.00</b> 25.4	29	26.5 x 33	<b>0.98</b> 24.8	796314-5	5
<b>1.25</b> 31.8	36	35.5 x 42	<b>1.31</b> 33.2	796314-6	5
<b>2.00</b> 50.8	48	51.5 x 60	<b>1.95</b> 49.6	796314-7	1

**\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).**

**Connections with Ferrules** (Continued)

**Performance Characteristics**

Multipart safety-type screwed conduit connection with integrated ferrule and with PG connecting thread DIN 40430 for all strip wound plastic conduit types.

**Construction**

Connector body with hexagon key surface, rigid steel conduit connecting thread DIN 40430 or metric ISO thread acc. EN 60423, hexagon pressure nut, sealing ring of plastic, to accept ferrules of plastic.

**Material**

Connector body, hexagon pressure nut and ferrule:  
high-grade resistant plastic (PP)

Sealing ring:  
Thermoplastic elastomer

**Properties**

Security conduit fitting with high dust-, waterproof, and friction-type locking of conduit and screw connection.

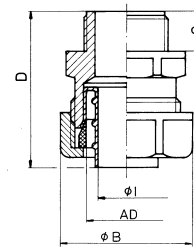
**Protective system**

IP 65 acc. EN 60529

**Temperature range**

From approx. -10°C up to approx. +110°C

**USK-P (IP 65)**



**Application**

Optimum protective conduit fitting, as protective insulated screw connection, appropriate according to the specifications EN 60204 in machine and installation construction.

**Suitable for conduit types**

For all protective plastic conduit types except type **ROHRflex**.

**Important**

**Security of the screwed conduit connection is only guaranteed with the correspondent ferrule.**

Trade Size** AD	Packet/Pieces	USK-P (Grey) Part Number	Thread DIN 40430 PG	Smallest Inner-Ø Ø I	Largest Inner-Ø Ø B	Length of Thread C	Total Length D	Wrench Size Body	Across Flats of Pressure Nut	Packet/Pieces	Weight kg/ 100 p. Approx.
0.39 10.0	10	969802-1	7	6	20	10	40	16	18	50	0.6
0.55 14.0	10	969802-2*	9	9	25	10	41	21	23	50	1.0
0.67 17.0	10	969802-3*	11	11	30	10	41	24	27	50	1.3
0.75 19.0	10	969802-4	13.5	13	32	10	41	26	29	50	1.7
0.83 21.0	10	969802-5*	16	14.5	35	11	42	29	32	50	2.0
1.06 27.0	10	969802-6	21	19.5	44	11	48	36	40	25	2.9
1.42 36.0	2	969802-7	29	27	54	12	48	45	49	25	3.9
1.77 45.0	2	969802-8	36	36	63	12	48	53	58	25	6.0
2.20 56.0	2	969802-9	48	46	77	15	57	65	70	10	8.4

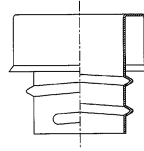
\*with NEMKO-Approval

\*\*Advice: For appropriate tubing/screw connecting combinations choose the same trade size AD (tubing outer-Ø).

**Connections with Ferrules** (Continued)

Terminal Sleeve, Tubing Connector.

EE



Trade Size AD	Conduit Dim.	Smallest Inner-Ø	Part Number	Packet/Pieces	Approx. Weight kg/100p
<b>0.39</b> 10.0	7 x 10	<b>0.24</b> 6.0	796313-1	50	0.32
<b>0.55</b> 14.0	11 x 14	<b>0.39</b> 10.0	796313-2	50	0.32
<b>0.67</b> 17.0	13 x 17	<b>0.45</b> 11.5	796313-3	50	0.50
<b>0.75</b> 19.0	15 x 19	<b>0.53</b> 13.5	796313-4	50	0.57
<b>0.83</b> 21.0	17 x 21	<b>0.61</b> 15.5	796313-5	50	0.64
<b>1.06</b> 27.0	23 x 27	<b>0.85</b> 21.5	796313-6	25	1.00
<b>1.42</b> 36.0	29 x 36	<b>1.08</b> 27.5	796313-7	25	1.48
<b>1.77</b> 45.0	38 x 45	<b>1.44</b> 36.5	796313-8	25	2.01
<b>2.20</b> 56.0	49 x 56	<b>1.87</b> 47.5	796313-9	10	2.80

## Chemical Resistance of Plastic Materials

Reagent	Concentration %	at temp. +°C	PU polyurethane	Soft PVC	Megolon ME	Polypropylene PP	Polyamide PA	Silicon SI
Acetaldehyde	100	20	+	-			40% o	
Acetic acid	10	20	o	+		+	o	
Acetone	100	20	-	-	o	+	+	+
Acrylic acid ethyl ester/acrylic resin lacquer	100	20		-			30% -	
Allyl alcohol	96	20	-	-		+	30% o	
Alum, hydrous	dilute	40		+		+		
Aluminum chloride, hydrous	dilute	40	+	+	o	+		o
Aluminum sulphate, hydrous	dilute	40	+	+	o	+		+
Ammonia solution	any	20	o	+		+	20% +	+
Ammonium chloride, hydrous	any	60	+	+	o	+		
Ammonium nitrate, hydrous	dilute	40	+	+		+		
Ammonium sulphate, hydrous	dilute	40	+	+	o	+		
Aniline, pure	100	20	-	-	o	+	o	+
Aniline hydrochloride, hydrous	saturated	20		+				
Benzaldehyde, hydrous	0.3	20		-		+	pure o	
Benzine	100	20	+	-		o	+	o
Benzoic acid	any	40	+	+		+		
Benzol	100	20	-	-		o	+	o
Bleaching liquor	12.5 cl	20		+		o		
Borax, hydrous	dilute	40		+		+		
Boric acid	dilute	40	-	+		+	o	
Boron	50	40		-			o	
Bromine, liquid	100	20	-	-		-	-	-
Butanediol	10	20	o	+		+	pure +	
Butanol	100	20	+	-		+		o
Butylacetate	100	20	-	-	o	o		o
Butyl alcohol	100	20	o	-		+		
Calcium chloride, hydrous	any	40	+	+	o	+	10% +	
Calcium nitrate, hydrous	50	40	+	+		+		
Carbamide, hydrous	10	40	+	+		+	20% +	
Carbon bisulphide	100	20	+	-		+	o	o
Carbon monoxide	100	60	+	+	o	+		
Carbon tetrachloride	100	20	+	-	o	o	+	
Carbonic acid	100	60	+	+		+		+
Caustic potash solution	50	20	o	o		+	+	o
Chlorine	any	20	-	-		-	-	-
Chrome alum, hydrous	dilute	40		+		+		
Citric acid	10	40	o	o		+		+
Copper monochloride, hydrous	saturated	20	+	+		+		
Copper sulphate, hydrous	any	40	+	+		+		
Cresol, hydrous	90	20	-	-		+	pure -	
Cyclohexanol	100	20	-	-		+	+	
Developer agent		40	+	+				
Dichloromethane	100	20	-	-		-	o	o
Diethyl ether	100	20	-	-		o	30% +	
Ethyl alcohol, hydrous	10	20	+	+	o	+	o	
Ethylene dichloride	100	20	-	-	o	o		
Ethylene oxide, liquid	100	20		-				
Ferric cyanide, hydrous	any	60		+		+		
Ferrous chloride, hydrous	10	40	+	+		+	o	
Fluorosilicic acid	30	20		+			+	

+ stands for: resistant  
 o stands for: conditionally resistant  
 - stands for: not resistant

**Chemical Resistance of Plastic Materials** (Continued)

Reagent	Concentration %	at temp. +°C	PU polyurethane	Soft PVC	Megolon ME	Polypropylene PP	Polyamide PA	Silicon SI
Fluorine	50	40		-			-	-
Formaldehyde, hydrous	dilute	40	o	+		+	pure +	
Formic acid, hydrous	100	20	-	-		+	10% o	+
Glacial acetic acid	100	20		-		+		
Glucose, hydrous	any	20	+	+		+		
Glycerol trinitrate	dilute	20						
Hydrobromic acid, hydrous	10	40	-	+		+	-	
Hydrochloric acid	10	30-40		-	o			+
Hydrochloric acid, hydrous	10	20	-	+		+	20% -	
Hydrogen	100	60	+	+	o		+	30% +
Hydroxylamine sulphate, hydrous	12	35	+	+				
Kerosine			+		o			o
Lactic acid, hydrous	50	20	o	+		+	pure +	
Magnesium carbonate	any	20	+	+				
Magnesium chloride, hydrous	any	20	+	+		+	10% o	+
Mercury		60	+	+		+	+	
Methyl alcohol	100	20	o	-	o	+		+
Methylenchlorid	100	20	-	-	o	-		o
Nickel chloride, hydrous	any	20	+	+		+	10% o	+
Nickel sulphate, hydrous	any	20	+	+		+	10% o	+
Nitric acid, hydrous	6	20	-	+	o	+	50% -	o
Oil and grease		20	+	o	+	+	+	o
Oleic acid	100	20	o	o	o	+	+	
Oxalic acid	saturated	20	o	+		+	10% o	o
Ozone	100	20	o	o		o	o	+
Phosgene, liquid	100	20	-	-				
Phosphoric acid, hydrous	dilute	20	o	+		+	10% -	+
Phosphorus pentoxide	100	20		o		+		
Potassium dichromate, hydrous	40	20	+	+		+		20% +
Potassium bromide, hydrous	any	60	o	+		+	10% +	
Potassium carbonate, hydrous	saturated	40	+	+				
Potassium chloride, hydrous	any	20	+	+		+	10% +	+
Potassium nitrate	any	20	+	+		+	10% +	+
Potassium permanganate, hydrous	6	20	-	+		+		
Potassium persulphate, hydrous	dilute	40	+	+		+		+
Sea water		40	+	+	+	+	+	+
Soap solution, hydrous	concentrated	20	+	+	+	+	o	+
Sodium chlorate, hydrous	any	20		+		+	10% o	
Sodium chloride solution	any	40	+	+	+	+		
Sodium hydroxide solution	10	20	o	+	o	+	10% +	
Sulphide, hydrous	dilute	40		+		+		
Sulphuric acid	10	20	+	+		+	80% -	+
Tin dichloride, hydrous	dilute	40	+	o		+		
Toluene	100	20	+	-	o	o	+	o
Trichloroethylene	100	20	-	-	o	o	o	
Vinyl acetate	100	20	-	-				
Waste-gas, containing carbon acid	any	60	+	+		+		
Waste-gas, containing CO	any	60	+	+		+		
Xylene	100	20	+	-	o	o	+	o
Zinc chloride, hydrous	dilute	60	+	o		+	10% o	
Zinc sulphate, hydrous	dilute	60	+	o		+		+

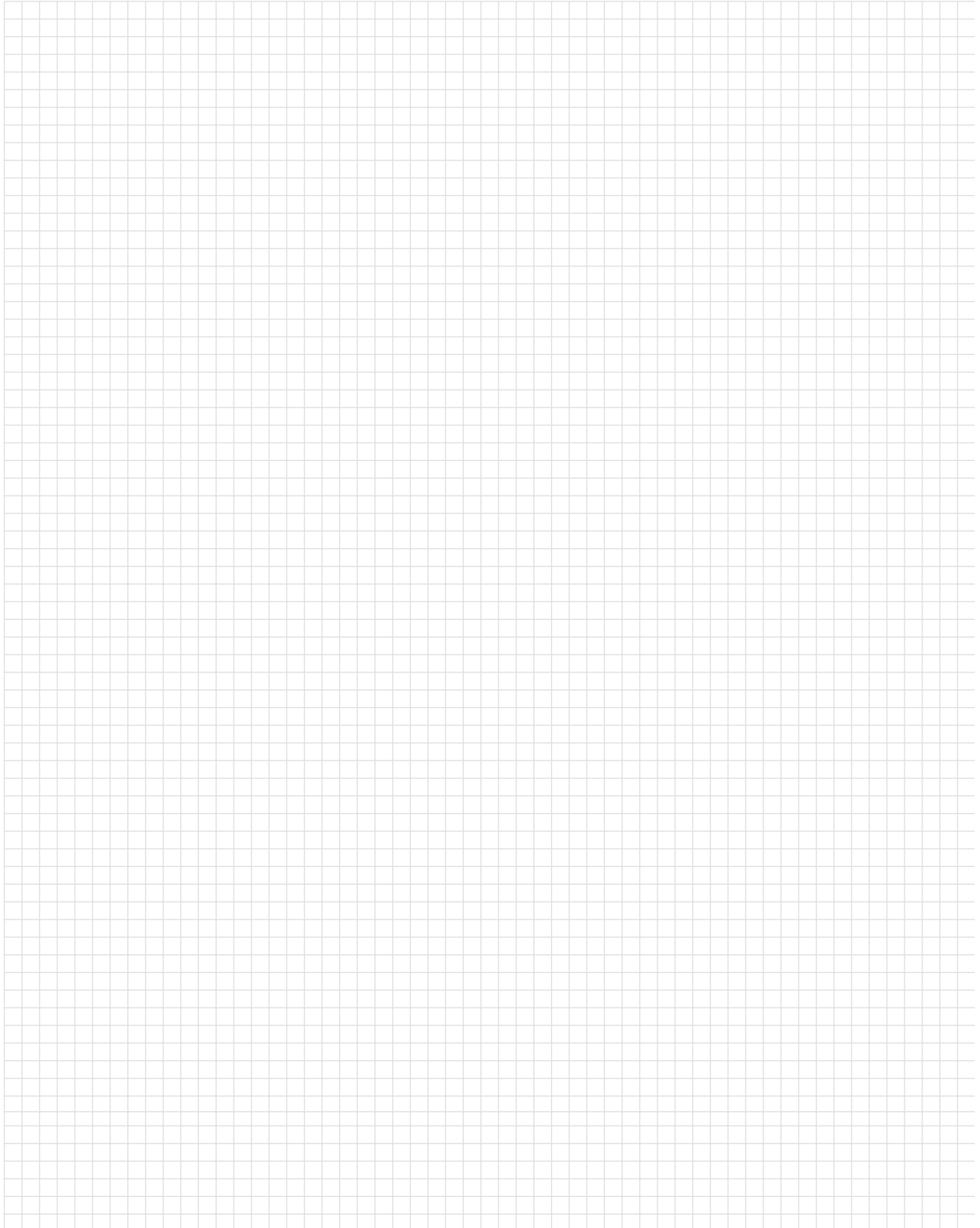
+ stands for: resistant  
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