

# 08 ANSCHLUSSTECHNIK CONNECTORS

ZUORDNUNGSTABELLE  
ASSIGNMENT TABLE

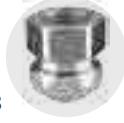
Nenngröße AD Schlauch-Außen-ø	Metr. Gewinde EN 60423	PG Gewinde DIN 40430
Trade Size OD Tubing outer ø	metric Thread EN 60423	PG Thread DIN 40430
10,0	M 10 x 1,0	PG 7
10,0	M 12 x 1,5	
14,0	M 12 x 1,5	PG 9
14,0	M 16 x 1,5	
17,0	M 16 x 1,5	PG 11
17,0	M 20 x 1,5	
19,0		PG 13,5
21,0	M 20 x 1,5	PG 16
21,0	M 25 x 1,5	
27,0	M 25 x 1,5	PG 21
27,0	M 32 x 1,5	
36,0	M 32 x 1,5	PG 29
36,0	M 40 x 1,5	
45,0	M 40 x 1,5	PG 36
45,0	M 50 x 1,5	
56,0	M 50 x 1,5	PG 48
56,0	M 63 x 1,5	

**US – M | – P**  
Metallverschraubung  
Metal connector



08. 2

**US2 – M**  
Metallverschraubung  
Metal connector



08. 8

**USDR – M**  
Metallverschraubung  
drehbares Gewinde  
Metal connector  
turnable thread



08.10

**USZ – M**  
Metallverschraubung  
Zugentlastung  
Metal connector  
strain relief



08.12

**USZ – EX – M**  
Metallverschraubung  
Zugentlastung  
Metal connector  
strain relief



08.14

**USD – M | – P**  
Metallverschraubung  
Metal connector



08.16

**LI – M | – P**  
Metallverschraubung  
integrierte Innentülle  
drehbar  
Metal connector  
integrated ferrule  
turnable



08.18

**LIF – M | – P**  
Metallverschraubung  
integrierte Innentülle  
Metal connector  
integrated ferrule



08.19

**USW – M | – P**  
Metallverschraubung  
Winkel 90°  
Metal connector  
elbow 90°



08.20

**USK – M | – P**  
Kunststoffverschraubung  
Plastic connector



08.24

**LKI – M | – P**  
Kunststoffverschraubung  
einteilig mit Innentülle  
drehbar  
Plastic connector  
one-part with ferrule  
turnable



08.25

**US – FOOD – M**  
Metallverschraubung  
Lebensmittelecht  
Metal connector  
food-safe



08.26

**EG – M | – P**  
Metallverschraubung  
Metal connector



08.27

**EW 45 – M | – P**  
Metallverschraubung  
Winkel 45°  
Metal connector  
elbow 45°



08.28

**EW 90 – M | – P**  
Metallverschraubung  
Winkel 90°  
Metal connector  
elbow 90°



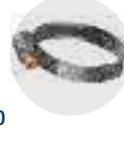
08.29

**NIMS – M | – P**  
Metall Schlaucholive  
Metal conduit olive



08.30

**SGL**  
Schelle passend zu  
Typ NIMS  
Clamp suitable for  
type NIMS



08.30

**MSD**  
Druckring  
Material Messing  
Thrust collar  
Material brass



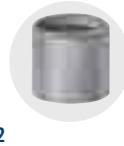
08.31

**TED**  
Dichtring  
Material PTFE  
Sealing  
Material PTFE



08.31

**EK**  
Endtülle  
Material Polypropylen  
Terminal sleeve  
Material polypropylene



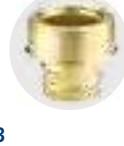
08.32

**AK**  
Endtülle | Übergangsstüle  
von Schlauch zu Kabel  
Material TPE  
End cap | transition  
from tubing to cable  
Material TPE



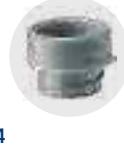
08.32

**EEM | EE**  
Endtülle | Innentülle  
Material Messing  
Terminal sleeve | ferrule  
Material brass



08.33

**EEK**  
Endtülle | Innentülle  
Material Kunststoff  
Terminal sleeve | ferrule  
Material plastics



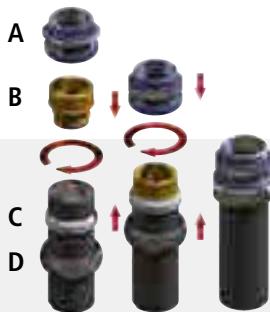
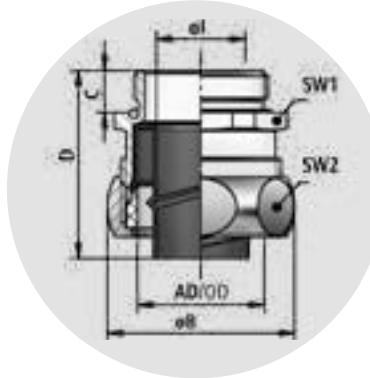
08.34

**Montage- und  
Trennhilfen**  
Mounting and  
parting tools



08.35

IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring
- B Innentüle  
ferrule
- C Dichtring oder Messing-Druckring  
sealing ring or brass thrust collar
- D Druckmutter  
pressure nut

## US-M

Metall-Sicherheitsverschraubung  
gerade  
Außengewinde  
inkl. Innentülle, Dichtring oder  
Messing-Druckring [MSD] und O-Ring

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, O-Ring  
Innentüle aus Metall / Kunststoff

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Innentüle	Messing   Kunststoff
O-Ring	NBR

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### WICHTIG

Die Funktionssicherheit der Verschraubung ist nur mit entsprechender Innentüle gewährleistet.  
Für EMV-Anwendung bitte die Montageanleitung beachten.

Metal connector, safety-type  
straight  
outer thread  
incl. ferrule, sealing or  
brass thrust collar [MSD] and O-ring

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423, hexagon pressure nut, plastic seal or brass thrust collar, O-ring ferrule made of metal / plastics

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Ferrule	brass   plastics
O-ring	NBR

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof
- 

### IMPORTANT

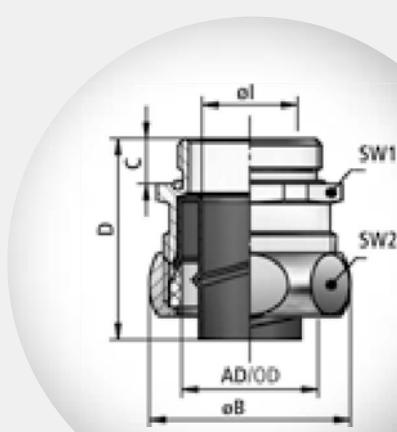
The security of the connector is only guaranteed with the corresponding ferrule.  
For emc-usage please see our assembly instructions.

AD OD							
Technische Basisdaten Technical basic data	US-M US-M						
Ø	Metr. EN 60423	øB mm	C mm	D mm	SW1 mm	SW2 mm	kg 100
10	M 10 x 1,0	19,0	10,0	31,0	15	17	1,390
14	M 12 x 1,5	23,0	10,0	33,0	19	21	2,140
17	M 16 x 1,5	27,0	10,0	33,0	23	25	3,000
21	M 20 x 1,5	31,0	10,0	33,0	27	29	3,940
27	M 25 x 1,5	39,0	11,0	41,0	34	36	7,500
36	M 32 x 1,5	48,0	13,0	43,0	43	45	11,300
45	M 40 x 1,5	57,0	13,0	43,0	52	54	15,000
56	M 50 x 1,5	70,0	14,0	49,0	63	66	21,800
56	M 63 x 1,5	74,0	14,0	49,0	70	70	27,100

## US-M

IP 40 ... IP 65  
-40°C ... +125°C

AD OD		FLEXA No.			FLEXA No.	
		SPR-AS SPR-VA			Kleine VPE small packing units	
Ø	Metr. EN 60423	[IP 40]	mm	øl mm	St. pcs.	St. pcs.
10	M 10 x 1,0	5010.327.010	8 x 10	6,5	50	5010.827.010
14	M 12 x 1,5	5010.327.012	11 x 14	9,0	50	5010.827.012
17	M 16 x 1,5	5010.327.016	14 x 17	12,5	50	5010.827.016
21	M 20 x 1,5	5010.327.020	18 x 21	16,0	50	5010.827.020
27	M 25 x 1,5	5010.327.025	23 x 27	21,0	25	5010.827.025
36	M 32 x 1,5	5010.327.032	31 x 36	27,5	25	5010.827.032
45	M 40 x 1,5	5010.327.040	40 x 45	35,0	20	5010.827.040
56	M 50 x 1,5	5010.327.050	51 x 56	45,0	10	5010.827.050
56	M 63 x 1,5	5010.327.163	51 x 56	45,0	10	5010.827.163
		SPR-PA SPR-PU-F SPR-PVC-AS SPR-PU-AS			Kleine VPE small packing units	
Ø	Metr. EN 60423	[IP 65]	mm	øl mm	St. pcs.	St. pcs.
10	M 10 x 1,0	5010.328.010	7 x 10	6,0	50	5010.828.010
14	M 12 x 1,5	5010.328.012	10 x 14	8,5	50	5010.828.012
17	M 16 x 1,5	5010.328.016	13 x 17	11,5	50	5010.828.016
21	M 20 x 1,5	5010.328.020	17 x 21	15,5	50	5010.828.020
27	M 25 x 1,5	5010.328.025	22 x 27	20,5	25	5010.828.025
36	M 32 x 1,5	5010.328.032	29 x 36	27,5	25	5010.828.032
45	M 40 x 1,5	5010.328.040	38 x 45	35,0	20	5010.828.040
56	M 50 x 1,5	5010.328.050	49 x 56	45,0	10	5010.828.050
56	M 63 x 1,5	5010.328.163	49 x 56	45,0	10	5010.828.163
		FLEXAgraff®-PU-AS FLEXAgraff®-PU-F			Kleine VPE small packing units	
Ø	Metr. EN 60423	[IP 65]	mm	øl mm	St. pcs.	St. pcs.
10	M 10 x 1,0	5010.328.010	7 x 10	6,0	50	5010.828.010
14	M 12 x 1,5	5010.327.012	11 x 14	9,0	50	5010.827.012
17	M 16 x 1,5	5010.328.016	13 x 17	11,5	50	5010.828.016
21	M 20 x 1,5	5010.328.020	17 x 21	15,5	50	5010.828.020
27	M 25 x 1,5	5010.340.025	23 x 27	21,0	25	5010.840.025
36	M 32 x 1,5	5010.328.032	29 x 36	27,5	25	5010.828.032
45	M 40 x 1,5	5010.328.040	38 x 45	35,0	20	5010.828.040
56	M 50 x 1,5	5010.328.050	49 x 56	45,0	10	5010.828.050
56	M 63 x 1,5	5010.328.163	49 x 56	45,0	10	5010.828.163
		AIRflex®-KUW-PVC-AS AIRflex®-KUW-PU-AS AIRflex®-GRS [IP 65] AIRflex®-K			Kleine VPE small packing units	
Ø	Metr. EN 60423	[IP 54]	mm	øl mm	St. pcs.	St. pcs.
10	M 10 x 1,0	5010.330.010	7 x 10	6,0	50	5010.830.010
14	M 12 x 1,5	5010.330.012	10 x 14	9,0	50	5010.830.012
17	M 16 x 1,5	5010.330.016	13 x 17	11,5	50	5010.830.016
21	M 20 x 1,5	5010.330.020	16 x 21	14,5	50	5010.830.020
27	M 25 x 1,5	5010.330.025	21 x 27	19,5	25	5010.830.025
36	M 32 x 1,5	5010.330.032	29 x 36	26,5	25	5010.830.032
45	M 40 x 1,5	5010.330.040	38 x 45	35,0	20	5010.830.040
56	M 50 x 1,5	5010.330.050	48 x 56	45,5	10	5010.830.050
56	M 63 x 1,5	5010.330.163	48 x 56	45,5	10	5010.830.163

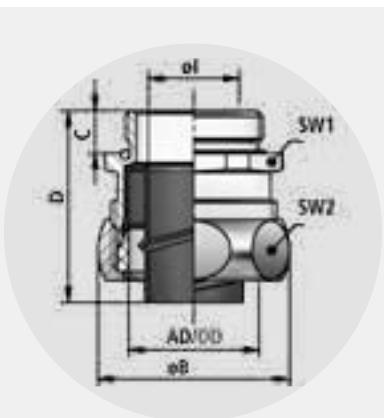


IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]

## US-M



AD OD	FLEXA No.		FLEXA No.	
	FLEXAgraf®-AS FLEXAgraf®-VA		Kleine VPE Small packing units	
Ø Metr. EN 60423	[IP 40]	mm	Øl mm	St. pcs.
10 M 10 x 1,0	5010.327.010	8 x 10	6,5	50
14 M 12 x 1,5	5010.339.012	12 x 14	9,0	50
17 M 16 x 1,5	5010.327.016	14 x 17	12,5	50
21 M 20 x 1,5	5010.327.020	18 x 21	16,5	50
27 M 25 x 1,5	5010.339.025	24 x 27	21,0	25
36 M 32 x 1,5	5010.327.032	31 x 36	27,5	25
45 M 40 x 1,5	5010.327.040	40 x 45	35,0	20
56 M 50 x 1,5	5010.327.050	51 x 56	45,0	10
56 M 63 x 1,5	5010.327.163	51 x 56	45,0	10



AD OD	FLEXA No.		FLEXA No.	
	FLEXAgraf®-SI-ASF			
Ø Metr. EN 60423	[IP 66]	mm	Øl mm	St. pcs.
14 M 12 x 1,5	5010.337.012	10 x 14	9,0	50
17 M 16 x 1,5	5010.337.016	12 x 17	10,5	50
21 M 20 x 1,5	5010.335.020	16 x 21	14,5	50
27 M 25 x 1,5	5010.301.025	21 x 27	19,5	25
36 M 32 x 1,5	5010.337.032	27 x 36	26,5	25
45 M 40 x 1,5	5010.337.040	36 x 45	34,5	20
56 M 50 x 1,5	5010.337.050	47 x 56	45,0	10
56 M 63 x 1,5	5010.337.163	47 x 56	45,0	10

	FLEXAgraf®-CU-AS		SPR-CU-AS SPR-EDU-AS FLEXAhightemp	
Ø Metr. EN 60423	[IP 40]	mm	Øl mm	[IP 40] mm Øl St. pcs.
10 M 10 x 1,0	5011.328.010	7 x 10	6,0	5011.328.010 7 x 10 6,0 50
14 M 12 x 1,5	5011.327.012	11 x 14	9,0	5011.328.012 10 x 14 8,5 50
17 M 16 x 1,5	5011.328.016	13 x 17	11,5	5011.328.016 13 x 17 11,0 50
21 M 20 x 1,5	5011.328.020	17 x 21	16,0	5011.328.020 17 x 21 15,5 50
27 M 25 x 1,5	5011.340.025	23 x 27	21,0	5011.328.025 22 x 27 20,5 25
36 M 32 x 1,5	5011.328.032	29 x 36	27,5	5011.328.032 29 x 36 27,5 25
45 M 40 x 1,5	5011.328.040	38 x 45	35,0	5011.328.040 38 x 45 35,0 20
56 M 50 x 1,5	5011.328.050	49 x 56	45,0	5011.328.050 49 x 56 45,0 10
56 M 63 x 1,5	5011.328.163	49 x 56	47,0	5011.328.163 49 x 56 45,0 10

	AIRflex®-KUW-EDU		SPR-PVC-EDU-AS	
Ø Metr. EN 60423	[IP 54]	mm	Øl mm	[IP 54] mm Øl St. Pcs.
14 M 12 x 1,5	5011.328.012	9 x 14	8,5	5011.328.012 9 x 14 8,5 50
17 M 16 x 1,5	5011.335.016	12 x 17	11,0	5011.335.016 12 x 17 11,0 50
21 M 20 x 1,5	5011.335.020	15 x 21	14,5	5011.335.020 16 x 21 14,5 50
27 M 25 x 1,5	5011.335.025	20 x 27	19,5	5011.301.025 21 x 27 19,5 25
36 M 32 x 1,5	5011.328.032	28 x 36	27,5	5011.337.032 28 x 36 27,5 25
45 M 40 x 1,5	5011.335.040	37 x 45	35,0	5011.335.040 37 x 45 35,0 20
56 M 50 x 1,5	5011.335.050	48 x 56	45,0	5011.335.050 48 x 56 45,0 10
56 M 63 x 1,5	5011.335.163	48 x 56	45,5	5011.335.163 48 x 56 45,5 10

# US-P

Metall-Sicherheitsverschraubung  
gerade, Außengewinde  
inkl. Innentülle, Dichtring oder  
Messing-Druckring [MSD] und O-Ring

## KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde PG nach DIN 40430, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, O-Ring  
Innentüllen aus Metall / Kunststoff

## MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Innentülle	Messing   Kunststoff
O-Ring	NBR

## EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfrei Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

## WICHTIG

Die Funktionssicherheit der Verschraubung ist nur mit entsprechender Innentülle gewährleistet.

Für EMV-Anwendung bitte die Montageanleitung beachten.

Metal connector, safety-type straight, outer thread incl. ferrule, sealing or brass thrust collar [MSD] and O-ring

IP 40 ... IP 65  
-40°C ... +125°C | +250°C [MSD]

## STRUCTURE

Connector body with hexagonal wrench surface, connecting thread PG acc. to DIN 40430, hexagon pressure nut, plastic seal or brass thrust collar, O-ring ferrule made of metal / plastics

## MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Ferrule	brass   plastics
O-ring	NBR

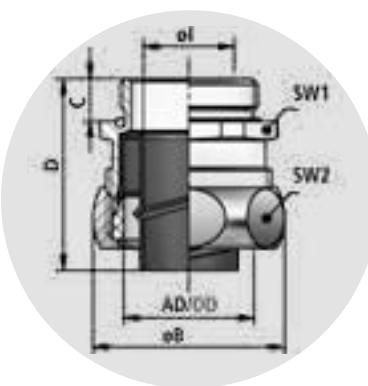


## PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof

## IMPORTANT

The security of the connector is only guaranteed with the corresponding ferrule.  
For emc-usage please see our assembly instructions.



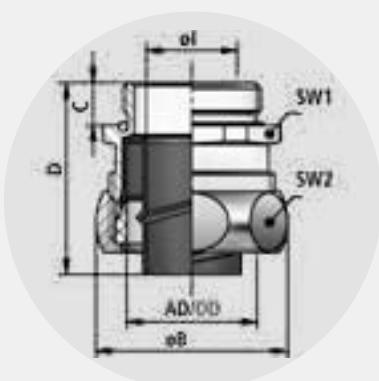
AD OD	PG DIN 40430	øB mm	C mm	D mm	SW1 mm	SW2 mm	kg/100
10	7	19,0	7,0	28,0	15	17	1,420
14	9	23,0	7,0	30,0	19	21	2,140
17	11	27,0	7,0	30,0	23	25	3,000
19	13,5	29,0	7,0	30,0	25	27	3,370
21	16	31,0	7,0	30,0	27	29	3,700
27	21	39,0	10,0	40,0	34	36	7,350
36	29	48,0	10,0	40,0	43	45	10,300
45	36	57,0	10,0	40,0	52	54	13,400
56	48	70,0	10,0	45,0	63	66	19,130



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring
- B Innentülle  
ferrule
- C Dichtring oder Messing-Druckring  
sealing ring or brass thrust collar
- D Druckmutter  
pressure nut

IP 40 ... IP 66  
-40°C ... +125°C

## US-P



AD OD	FLEXA No.		FLEXA No.	
	SPR-AS SPR-VA		Kleine VPE small packing units	
Ø	PG DIN 40430	[IP 40]	øl mm	St. pcs.
10	7	5010.127.007	8 x 10	50
14	9	5010.127.009	11 x 14	50
17	11	5010.127.011	14 x 17	50
19	13,5	5010.127.013	16 x 19	50
21	16	5010.127.016	18 x 21	50
27	21	5010.127.021	23 x 27	25
36	29	5010.127.029	31 x 36	25
45	36	5010.127.036	40 x 45	20
56	48	5010.127.048	51 x 56	10
	SPR-PA SPR-PU-F SPR-PVC-AS SPR-PU-AS		Kleine VPE small packing units	
Ø	PG DIN 40430	[IP 65]	øl mm	St. pcs.
10	7	5010.128.007	7 x 10	50
14	9	5010.128.009	10 x 14	50
17	11	5010.128.011	13 x 17	50
19	13,5	5010.128.013	15 x 19	50
21	16	5010.128.016	17 x 21	50
27	21	5010.128.021	22 x 27	25
36	29	5010.128.029	29 x 36	25
45	36	5010.128.036	38 x 45	20
56	48	5010.128.048	49 x 56	10
	FLEXAgraff®-PU-AS FLEXAgraff®-PU-F		Kleine VPE small packing units	
Ø	PG DIN 40430	[IP 65]	øl mm	St. pcs.
10	7	5010.128.007	7 x 10	50
14	9	5010.127.009	11 x 14	50
17	11	5010.128.011	13 x 17	50
19	13,5	5010.128.013	15 x 19	50
21	16	5010.128.016	17 x 21	50
27	21	5010.140.021	23 x 27	25
36	29	5010.128.029	29 x 36	25
45	36	5010.128.036	38 x 45	20
56	48	5010.128.048	49 x 56	10
	AIRflex®-KUW-PVC-AS AIRflex®-KUW-PU-AS AIRflex®-GRS [IP 65] AIRflex®-K		Kleine VPE small packing units	
Ø	PG DIN 40430	[IP 54]	øl mm	St. pcs.
10	7	5010.130.007	7 x 10	50
14	9	5010.130.009	10 x 14	50
17	11	5010.130.011	13 x 17	50
19	13,5	5010.130.013	15 x 19	50
21	16	5010.130.016	16 x 21	50
27	21	5010.130.021	21 x 27	25
36	29	5010.130.029	29 x 36	25
45	36	5010.130.036	38 x 45	20
56	48	5010.130.048	48 x 56	10

## US-P

IP 40 ... IP 65  
-40°C ... +125°C | +250°C [MSD]

AD OD		FLEXA No.			FLEXA No.	
		FLEXAgraf®-AS FLEXAgraf®-VA			Kleine VPE small packing units	
Ø	PG	[IP 40]	mm	øl mm	St. pcs.	[IP 40]
	DIN 40420					St. pcs.
10	7	5010.127.007	8 x 10	6,5	50	5010.427.007
14	9	5010.139.009	12 x 14	10,5	50	5010.439.009
17	11	5010.127.011	14 x 17	12,5	50	5010.427.011
19	13,5	5010.127.013	16 x 19	14,5	50	5010.427.013
21	16	5010.127.016	18 x 21	16,5	50	5010.427.016
27	21	5010.139.021	24 x 27	21,5	25	5010.439.021
36	29	5010.127.029	31 x 36	29,5	25	5010.427.029
45	36	5010.127.036	40 x 45	38,0	20	5010.427.036
56	48	5010.127.048	51 x 56	49,0	10	5010.427.048



AD OD		FLEXA No.			FLEXA No.			FLEXA No.	
		FLEXAgraf®-SI-ASF							
Ø	PG	[IP 66]	mm	øl mm					St. pcs.
	DIN 40420								
14	9	5010.137.009	10 x 14	9,0					50
17	11	5010.137.011	12 x 17	10,5					50
21	16	5010.135.016	16 x 21	14,5					50
27	21	5010.601.021	21 x 27	19,5					25
36	29	5010.137.029	27 x 36	26,5					25
45	36	5010.137.036	36 x 45	34,5					20
56	48	5010.137.048	47 x 56	45,5					10



	FLEXAgraf®-CU-AS		SPR-CU-AS		SPR-EDU-AS		FLEXAhightemp	
Ø	PG	[IP 40]	mm	øl mm	[IP 40]	mm	øl mm	St. pcs.
	DIN 40420							
10	7	5011.128.007	7 x 10	6,0	5011.128.007	7 x 10	6,0	50
14	9	5011.127.009	11 x 14	10,0	5011.128.009	10 x 14	8,5	50
17	11	5011.128.011	13 x 17	11,5	5011.128.011	13 x 17	11,5	50
19	13,5	5011.128.013	15 x 19	13,5	5011.128.013	15 x 19	13,5	50
21	16	5011.128.016	17 x 21	15,5	5011.128.016	17 x 21	15,5	50
27	21	5011.140.021	23 x 27	21,5	5011.128.021	22 x 27	20,5	25
36	29	5011.128.029	29 x 36	27,5	5011.128.029	29 x 36	27,5	25
45	36	5011.128.036	38 x 45	36,5	5011.128.036	38 x 45	36,5	20
56	48	5011.128.048	49 x 56	47,5	5011.128.048	49 x 56	47,5	10

	AIRflex®-KUW-EDU		SPR-PVC-EDU-AS	
Ø	PG	[IP 54]	mm	øl mm
	DIN 40420			
14	9	5011.128.009	9 x 14	8,5
17	11	5011.135.011	12 x 17	11,0
19	13,5	5011.135.013	14 x 19	13,0
21	16	5011.135.016	15 x 21	14,5
27	21	5011.135.021	20 x 27	19,5
36	29	5011.128.029	28 x 36	27,5
45	36	5011.135.036	37 x 45	35,5
56	48	5011.135.048	48 x 56	47,0

IP 40 ... IP 65  
-40°C ... +125°C | +250°C [MSD]



## US2-M

Metall-Sicherheitsverschraubung  
gerade  
Innengewinde  
inkl. Innentülle und Dichtring aus TPE  
oder Messing-Druckring [MSD]

Metal connector, safety-type  
straight  
inner thread  
incl. ferrule and sealing made of TPE  
or brass thrust collar [MSD]

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, Innentülle aus Metall

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423, hexagon pressure nut, plastic seal or brass thrust collar, ferrule made of metal

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Innentülle	Messing

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Ferrule	brass

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof

### WICHTIG

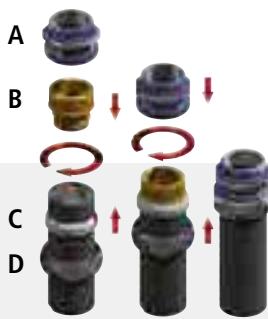
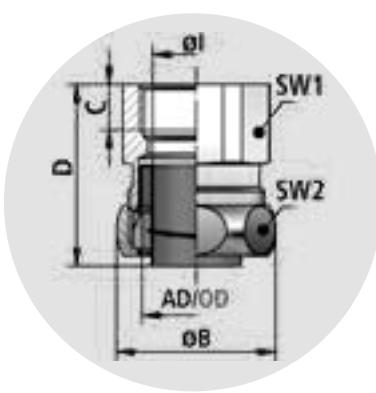
Die Funktionssicherheit der Verschraubung ist nur mit entsprechender Innentülle gewährleistet.

Für EMV-Anwendung bitte die Montageanleitung beachten.

### IMPORTANT

The security of the connector is only guaranteed with the corresponding ferrule.

For emc-usage please see our assembly instructions.



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring  
B Innentülle  
ferrule  
C Dichtring oder Messing-Druckring  
sealing ring or brass thrust collar  
D Druckmutter  
pressure nut



Technische Basisdaten  
Technical basic data

US2-M  
US2-M

<b>Ø</b>	<b>Metr. EN 60423</b>	<b>ØB mm</b>	<b>C mm</b>	<b>D mm</b>	<b>SW1 mm</b>	<b>SW2 mm</b>	<b>kg 100</b>
10	M 10 x 1,5	19,0	8,0	26,0	15	17	1,500
14	M 12 x 1,5	23,0	8,0	27,0	21	21	2,300
17	M 16 x 1,5	27,0	8,0	27,0	24	25	3,000
21	M 20 x 1,5	31,0	10,0	30,0	30	29	4,000
27	M 25 x 1,5	39,0	11,0	37,0	36	36	7,600
36	M 32 x 1,5	48,0	11,0	39,0	46	45	10,100
45	M 40 x 1,5	57,0	12,0	42,0	55	54	13,500
56	M 50 x 1,5	70,0	12,0	46,0	65	66	20,000

# US2-M

IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]

AD OD	FLEXA No.		FLEXA No.	
	SPR-AS SPR-VA		SPR-PA SPR-PU-F SPR-PVC-AS SPR-PU-AS	
Ø	Metr. EN 60423	[IP 40] mm	øl mm	[IP 65] mm
10	M 10 x 1,5	5012.327.010	7 x 10	5012.328.010
14	M 12 x 1,5	5012.327.012	11 x 14	5012.328.012
17	M 16 x 1,5	5012.327.016	14 x 17	5012.328.016
21	M 20 x 1,5	5012.327.020	18 x 21	5012.328.020
27	M 25 x 1,5	5012.327.025	23 x 27	5012.328.025
36	M 32 x 1,5	5012.327.032	31 x 36	5012.328.032
45	M 40 x 1,5	5012.327.040	40 x 45	5012.328.040
56	M 50 x 1,5	5012.327.050	51 x 56	5012.328.050
		FLEXAgraff®-AS FLEXAgraff®-VA		FLEXAgraff®-PU-AS FLEXAgraff®-PU-F
Ø	Metr. EN 60423	[IP 40] mm	øl mm	[IP 65] mm
10	M 10 x 1,5	5012.327.010	8 x 10	5012.328.010
14	M 12 x 1,5	5012.339.012	12 x 14	5012.327.012
17	M 16 x 1,5	5012.327.016	14 x 17	5012.328.016
21	M 20 x 1,5	5012.327.020	18 x 21	5012.328.020
27	M 25 x 1,5	5012.339.025	24 x 27	5012.340.025
36	M 32 x 1,5	5012.327.032	31 x 36	5012.328.032
45	M 40 x 1,5	5012.327.040	40 x 45	5012.328.040
56	M 50 x 1,5	5012.327.050	51 x 56	5012.328.050
		AIRflex®-KUW-EDU		SPR-CU-AS SPR-EDU-AS
Ø	Metr. EN 60423	[IP 54] mm	øl mm	[IP 40] mm
10	M 10 x 1,5	5018.328.010	7 x 10	5018.328.010
14	M 12 x 1,5	5018.328.012	9 x 14	5018.328.012
17	M 16 x 1,5	5018.335.016	12 x 17	5018.328.016
21	M 20 x 1,5	5018.335.020	15 x 21	5018.328.020
27	M 25 x 1,5	5018.335.025	20 x 27	5018.328.025
36	M 32 x 1,5	5018.328.032	28 x 36	5018.328.032
45	M 40 x 1,5	5018.335.040	37 x 45	5018.328.040
56	M 50 x 1,5	5018.335.050	48 x 56	5018.328.050
		FLEXAgraff®-CU-AS		
Ø	Metr. EN 60423	[IP 40] mm	øl mm	St. pcs.
10	M 10 x 1,5	5018.328.010	7 x 10	6,0
14	M 12 x 1,5	5018.328.012	11 x 14	9,0
17	M 16 x 1,5	5018.328.016	13 x 17	11,5
21	M 20 x 1,5	5018.328.020	17 x 21	15,5
27	M 25 x 1,5	5018.340.025	23 x 27	20,5
36	M 32 x 1,5	5018.328.032	29 x 36	27,5
45	M 40 x 1,5	5018.328.040	38 x 45	35,0
56	M 50 x 1,5	5018.328.050	49 x 56	45,0



IP 40 ... IP 65  
-40°C ... +125°C | +250°C [MSD]



## USDR-M

Metall-Sicherheitsverschraubung  
gerade  
Außengewinde drehbar  
inkl. Innentülle, Dichtring aus TPE  
oder Messing-Druckring [MSD] und O-Ring

Metal connector, safety-type  
straight  
turnable outer thread  
incl. ferrule, sealing made of TPE  
or brass thrust collar [MSD] and O-ring

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, O-Ring, Innentüllen aus Metall

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423, hexagon pressure nut, plastic seal or brass thrust collar, O-ring, ferrule made of metal

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Innentülle	Messing
O-Ring	NBR

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Ferrule	brass
O-ring	NBR

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### PROPERTIES

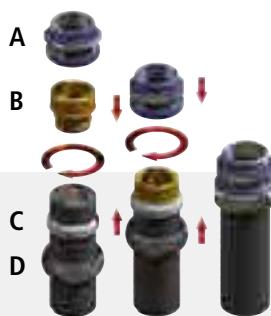
- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof

### WICHTIG

Die Funktionssicherheit der Verschraubung ist nur mit entsprechender Innentülle gewährleistet.  
Für EMV-Anwendung bitte die Montageanleitung beachten.

### IMPORTANT

The security of the connector is only guaranteed with the corresponding ferrule.  
For emc-usage please see our assembly instructions.



A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring

B Innentülle  
ferrule

C Dichtring oder  
Messing-Druckring  
sealing ring or  
brass thrust collar

D Druckmutter  
pressure nut

AD OD	Technische Basisdaten Technical basic data	USDR-M		USDR-M		kg/100	
		Ø Metr. EN 60423	ØB mm	C mm	D mm		
10	M 12 x 1,5	19,0	10,0	28,0	15	17	2,400
14	M 16 x 1,5	23,0	10,0	30,0	21	21	5,000
17	M 20 x 1,5	27,0	10,0	30,0	24	25	6,400
21	M 25 x 1,5	31,0	11,0	31,0	30	29	9,500
27	M 32 x 1,5	39,0	13,0	38,0	36	36	14,900
36	M 40 x 1,5	48,0	13,0	42,0	46	45	23,900
45	M 50 x 1,5	57,0	14,0	50,0	55	54	36,200
56	M 63 x 1,5	70,0	14,0	54,0	70	66	61,000

# USDR-M

IP 40 ... IP 65  
-40°C ... +125°C | +250°C [MSD]

AD OD	FLEXA No.		FLEXA No.	
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SPR-AS



SPR-VA

SPR-PA

SPR-PU-F  
SPR-PVC-AS  
SPR-PU-AS

Ø	Metr. EN 60423	[IP 40]		Øl mm	[IP 65]		Øl mm	St. pcs.
		mm	mm		mm	mm		
10	M 12 x 1,5	5013.327.012	8 x 10	6,5	5013.328.012	7 x 10	6,0	10
14	M 16 x 1,5	5013.327.016	11 x 14	7,5	5013.328.016	10 x 14	8,5	10
17	M 20 x 1,5	5013.327.020	14 x 17	11,0	5013.328.020	13 x 17	11,5	10
21	M 25 x 1,5	5013.327.025	18 x 21	14,5	5013.328.025	17 x 21	15,5	10
27	M 32 x 1,5	5013.327.032	23 x 27	19,5	5013.328.032	22 x 27	20,5	10
36	M 40 x 1,5	5013.327.040	31 x 36	27,5	5013.328.040	29 x 36	27,5	2
45	M 50 x 1,5	5013.327.050	40 x 45	35,5	5013.328.050	38 x 45	35,0	2
56	M 63 x 1,5	5013.327.063	51 x 56	47,0	5013.328.063	49 x 56	45,0	2

FLEXAgraff®-AS  
FLEXAgraff®-VAFLEXAgraff®-PU-AS  
FLEXAgraff®-PU-F

Ø	Metr. EN 60423	[IP 40]		Øl mm	[IP 65]		Øl mm	St. pcs.
		mm	mm		mm	mm		
10	M 12 x 1,5	5013.327.012	8 x 10	6,5	5013.328.012	7 x 10	6,0	10
14	M 16 x 1,5	5013.339.016	12 x 14	9,0	5013.327.016	11 x 14	9,0	10
17	M 20 x 1,5	5013.327.020	14 x 17	12,5	5013.328.020	13 x 17	11,5	10
21	M 25 x 1,5	5013.327.025	18 x 21	16,5	5013.328.025	17 x 21	15,5	10
27	M 32 x 1,5	5013.339.032	24 x 27	21,0	5013.340.032	23 x 27	20,5	10
36	M 40 x 1,5	5013.327.040	31 x 36	27,5	5013.328.040	29 x 36	27,5	2
45	M 50 x 1,5	5013.327.050	40 x 45	35,0	5013.328.050	38 x 45	35,0	2
56	M 63 x 1,5	5013.327.063	51 x 56	45,0	5013.328.063	49 x 56	45,0	2



AIRflex®-KUW-EDU

SPR-CU-AS  
SPR-EDU-AS

Ø	Metr. EN 60423	[IP 54]		Øl mm	[IP 40]		Øl mm	St. pcs.
		mm	mm		mm	mm		
10	M 12 x 1,5	5014.328.012	7 x 10	6,0	5014.328.012	7 x 10	6,0	10
14	M 16 x 1,5	5014.328.016	9 x 14	8,5	5014.328.016	10 x 14	8,5	10
17	M 20 x 1,5	5014.335.020	12 x 17	11,0	5014.328.020	13 x 17	11,5	10
21	M 25 x 1,5	5014.335.025	15 x 21	14,5	5014.328.025	17 x 21	15,5	10
27	M 32 x 1,5	5014.335.032	20 x 27	19,5	5014.328.032	22 x 27	20,5	10
36	M 40 x 1,5	5014.328.040	28 x 36	27,5	5014.328.040	29 x 36	27,5	2
45	M 50 x 1,5	5014.335.050	37 x 45	35,0	5014.328.050	38 x 45	35,0	2
56	M 63 x 1,5	5014.335.063	48 x 56	45,0	5014.328.063	51 x 56	45,0	2



FLEXAgraff®-CU-AS



Ø	Metr. EN 60423	[IP 40]		Øl mm	St. pcs.
		mm	mm		
10	M 12 x 1,5	5014.328.012	7 x 10	6,0	10
14	M 16 x 1,5	5014.327.016	11 x 14	9,0	10
17	M 20 x 1,5	5014.328.020	13 x 17	11,5	10
21	M 25 x 1,5	5014.328.025	17 x 21	15,5	10
27	M 32 x 1,5	5014.340.032	23 x 27	20,5	10
36	M 40 x 1,5	5014.328.040	29 x 36	27,5	2
45	M 50 x 1,5	5014.328.050	38 x 45	35,0	2
56	M 63 x 1,5	5014.328.063	49 x 56	45,0	2



IP 40 ... IP 65  
-40°C ... +100°C



## USZ-M

Metall-Sicherheitsverschraubung  
gerade  
Außengewinde  
Zugentlastung  
inkl. Innentülle, Dichtring aus TPE oder  
Messing-Druckring [MSD] und O-Ring

Metal connector, safety-type  
straight  
outer thread  
strain relief  
incl. ferrule, sealing made of TPE  
or brass thrust collar [MSD] and O-ring

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskant-Druckmutter, Kunststoff-Dichtring oder Messing-Druckring, O-Ring, Innentülle aus Metall

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423, hexagon pressure nut, plastic seal or brass thrust collar, O-ring, ferrule made of metal

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Zwischenstück	Messing vernickelt
Dichteinsatz	TPE
Innentülle	Messing
O-Ring	NBR

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Intermediate part	nickel-plated brass
Sealing insert	TPE
Ferrule	brass
O-ring	NBR

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof

### WICHTIG

Die Funktions Sicherheit der Verschraubung ist nur mit entsprechender Innentülle gewährleistet.  
Für EMV-Anwendung bitte die Montageanleitung beachten.

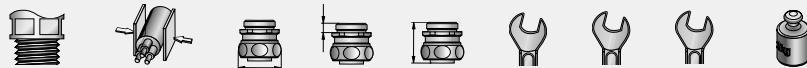
### IMPORTANT

The security of the connector is only guaranteed with the corresponding ferrule.  
For emc-usage please see our assembly instructions.



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring  
  
B Innentülle  
ferrule  
  
C Dichtring oder  
Messing-Druckring  
sealing ring or  
brass thrust collar  
  
D Druckmutter  
pressure nut

AD  
OD



Technische Basisdaten USZ-M  
Technical basic data USZ-M

<b>Ø</b>	<b>Metr.</b> EN 60423	<b>mm</b>	<b>øB</b> mm	<b>C</b> mm	<b>D</b> mm	<b>SW1</b> mm	<b>SW2</b> mm	<b>SW3</b> mm	<b>kg 100</b>
10	M 12 x 1,5	5,0 - 6,5	19,0	10,0	43,0	15	16	17	2,090
14	M 16 x 1,5	6,0 - 10,5	23,0	10,0	48,0	18	21	21	4,070
17	M 20 x 1,5	8,0 - 14,5	27,0	10,0	48,0	24	24	25	5,390
21	M 20 x 1,5	8,0 - 14,5	31,0	10,0	49,0	24	29	29	6,990
21	M 25 x 1,5	12,5 - 19,0	31,0	11,0	54,0	30	30	29	7,210
27	M 25 x 1,5	12,5 - 19,0	39,0	11,0	61,0	30	36	36	13,200
27	M 32 x 1,5	17,0 - 25,5	39,0	13,0	65,0	36	36	36	14,650
36	M 40 x 1,5	24,0 - 33,0	48,0	13,0	68,0	46	46	45	23,870
45	M 50 x 1,5	33,0 - 42,0	57,0	14,0	74,0	55	55	54	31,150
56	M 63 x 1,5	40,0 - 52,0	70,0	14,0	81,0	70	70	66	34,000

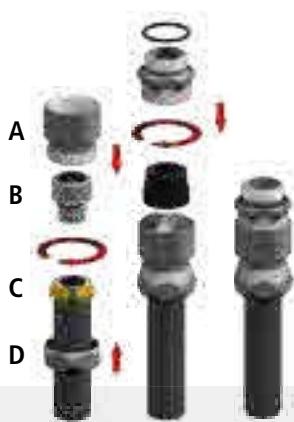
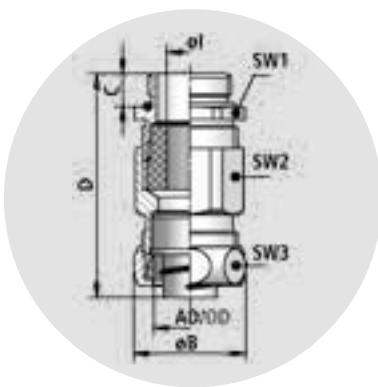
# USZ-M

IP 40 ... IP 65  
-40°C ... +100°C

AD OD	FLEXA No.		FLEXA No.	
	SPR-AS SPR-VA		SPR-PA SPR-PU-F SPR-PVC-AS SPR-PU-AS	
ø	Metr. EN 60423	[IP 40] mm	øl mm	[IP 65] mm
10	M 12 x 1,5	5016.327.112	8 x 10	6,5
14	M 16 x 1,5	5016.327.116	11 x 14	9,0
17	M 20 x 1,5	5016.327.120	14 x 17	12,5
21	M 20 x 1,5	5016.327.020	18 x 21	16,0
21	M 25 x 1,5	5016.327.125	18 x 21	16,0
27	M 25 x 1,5	5016.327.025	23 x 27	21,0
27	M 32 x 1,5	5016.327.132	23 x 27	21,0
36	M 40 x 1,5	5016.327.140	31 x 36	27,5
45	M 50 x 1,5	5016.327.150	40 x 45	35,0
56	M 63 x 1,5	5016.327.163	51 x 56	45,0
		FLEXAgraff®-AS FLEXAgraff®-VA		FLEXAgraff®-PU-AS FLEXAgraff®-PU-F
ø	Metr. EN 60423	[IP 40] mm	øl mm	[IP 65] mm
10	M 12 x 1,5	5016.327.112	8 x 10	6,5
14	M 16 x 1,5	5016.339.116	12 x 14	9,0
17	M 20 x 1,5	5016.327.120	14 x 17	12,5
21	M 20 x 1,5	5016.327.020	18 x 21	16,0
21	M 25 x 1,5	5016.327.125	18 x 21	16,0
27	M 25 x 1,5	5016.339.025	24 x 27	21,0
27	M 32 x 1,5	5016.339.132	24 x 27	21,0
36	M 40 x 1,5	5016.327.140	31 x 36	27,5
45	M 50 x 1,5	5016.327.150	40 x 45	35,0
56	M 63 x 1,5	5016.327.163	51 x 56	45,0
		AIRflex®-KUW-EDU		SPR-CU-AS SPR-EDU-AS
ø	Metr. EN 60423	[IP 54] mm	øl mm	[IP 40] mm
10	M 12 x 1,5	5017.328.112	7 x 10	6,0
14	M 16 x 1,5	5017.328.116	9 x 14	9,0
17	M 20 x 1,5	5017.335.120	12 x 17	12,5
21	M 20 x 1,5	5017.335.020	15 x 21	16,0
21	M 25 x 1,5	5017.335.125	15 x 21	16,0
27	M 25 x 1,5	5017.335.025	20 x 27	21,0
27	M 32 x 1,5	5017.335.032	20 x 27	21,0
36	M 40 x 1,5	5017.328.140	28 x 36	27,5
45	M 50 x 1,5	5017.335.150	37 x 45	35,0
56	M 63 x 1,5	5017.335.163	48 x 56	45,0
		FLEXAgraff®-CU-AS		
ø	Metr. EN 60423	[IP 40] mm	øl mm	St. pcs.
10	M 12 x 1,5	5017.328.112	7 x 10	6,0
14	M 16 x 1,5	5017.327.116	11 x 14	9,0
17	M 20 x 1,5	5017.328.120	13 x 17	11,0
21	M 20 x 1,5	5017.328.020	17 x 21	15,5
21	M 25 x 1,5	5017.328.125	17 x 21	15,5
27	M 25 x 1,5	5017.340.025	23 x 27	20,5
27	M 32 x 1,5	5017.340.132	23 x 27	20,5
36	M 40 x 1,5	5017.328.140	29 x 36	27,5
45	M 50 x 1,5	5017.328.150	38 x 45	35,0
56	M 63 x 1,5	5017.328.163	49 x 56	45,0



IP 40  
-40°C ... +100°C



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring
- B Innentülle  
ferrule
- C Dichtring oder Messing-Druckring  
sealing ring or brass thrust collar
- D Druckmutter  
pressure nut

## USZ-EX-M

Metall-Sicherheitsverschraubung  
gerade, Außengewinde, Zugentlastung  
für Einsatz im EX-Bereich  
inkl. Innentülle, Dichtring aus TPE oder  
Messing-Druckring [MSD] und O-Ring

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, O-Ring, Innentülle aus Metall

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Klemmring	TPE
Druckring	Messing
Innentülle	Messing
Zwischenstück	Messing vernickelt
Dichteinsatz	TPE
Zwischenstützen	Messing vernickelt
O-Ring	NBR

Kennzeichnung der Verschraubung

Ex II 2 G Ex e II  
Ex II 2 D Ex tD A21 IP 66 | IP68

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest
- erhöhte Sicherheit „e“ nach EN 60079-0:2014, EN 60079-7:2016, EN 61241-0:2006 und EN 61241-1:2004

### WICHTIG

Es dürfen nur metallische oder metallisch umflochtene Schutzschläuche ohne äußeren Kunststoffmantel verwendet werden.

Metal connector, safety-type straight, outer thread, strain relief for application in EX-Area incl. ferrule, sealing made of TPE or brass thrust collar [MSD] and O-ring

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423, hexagon pressure nut, plastic seal or brass thrust collar, O-ring, ferrule made of metal

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Clamp collar	TPE
Thrust collar	brass
Ferrule	brass
Intermediate part	nickel-plated brass
Sealing insert	TPE
Lower part	nickel-plated brass
O-ring	NBR

Marking of the cable gland

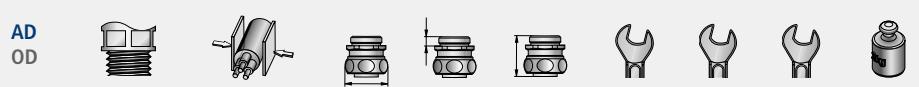
Ex II 2 G Ex e II  
Ex II 2 D Ex tD A21 IP 66 | IP68

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof
- increased safety "e" acc. to EN 60079-0:2014, EN 60079-7:2016, EN 61241-0:2006 and EN 61241-1:2004

### IMPORTANT

Only metallic or metal-braided protection conduits without exterior plastic sheathing must be used.



Technische Basisdaten USZ-EX-M  
Technical basic data USZ-EX-M

Ø	Metr. EN 60423	mm	øB mm	C mm	D mm	SW1 mm	SW2 mm	SW3 mm	kg/100
17	M 20 x 1,5	9,5 - 11,0	27,0	10,0	48,0	24	24	25	6,600
21	M 20 x 1,5	12,0 - 15,0	31,0	10,0	49,0	24	29	29	9,700
21	M 25 x 1,5	13,0 - 16,0	31,0	11,0	54,0	30	30	29	9,900
27	M 32 x 1,5	19,0 - 21,0	39,0	13,0	65,0	36	36	36	16,600

# USZ-EX-M

IP 40  
-40°C ... +100°C



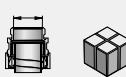
AD OD	FLEXA No.		FLEXA No.	
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SPR-AS  
SPR-VA



FLEXAgraff®-AS  
FLEXAgraff®-VA



Ø	Metr. EN 60423	[IP 40]	mm	øl mm	[IP 40]	mm	øl mm	St. pcs.
17	M 20 x 1,5	5023.327.120	14 x 17	12,5	5023.327.120	14 x 17	12,5	10
21	M 20 x 1,5	5023.327.020	18 x 21	16,0	5023.327.020	18 x 21	16,0	10
21	M 25 x 1,5	5023.327.125	18 x 21	16,0	5023.327.125	18 x 21	16,0	10
27	M 32 x 1,5	5023.327.132	23 x 27	21,0	5023.339.132	24 x 27	21,0	10



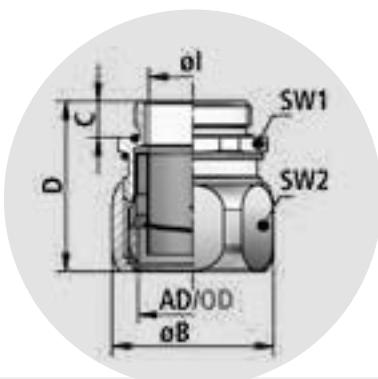
SPR-CU-AS  
SPR-EDU-AS



Ø	Metr. EN 60423	[IP 40]	mm	øl mm	St. pcs.
17	M 20 x 1,5	5024.328.120	13 x 17	11,5	10
21	M 20 x 1,5	5024.328.020	17 x 21	15,5	10
21	M 25 x 1,5	5024.328.125	17 x 21	15,5	10
27	M 32 x 1,5	5024.328.132	22 x 27	20,5	10



IP 67  
-40°C ... +125°C



**A** Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring

**B** MS-Innentülle  
brass ferrule

**C** EMV-Messingdruckring  
emc brass thrust collar

**D** TPE-Dichtring  
TPE sealing ring

**E** Druckmutter  
pressure nut

## USD

EMV Metallverschraubung  
gerade  
Außengewinde  
inkl. Innentülle und O-Ring

EMC metal connector  
straight  
outer thread  
incl. ferrule and O-ring

### KONSTRUKTION

Gehäuse mit Sechskantschlüsselfläche,  
feststehendes Anschlussgewinde,  
verlängerte Sechskantdruckmutter,  
Dichtring, Messing-Druckring,  
Innentülle und O-Ring

### STRUCTURE

Connector body with hexagonal wrench  
surface, longer hexagonal pressure nut,  
sealing ring, brass thrust collar  
ferrule and O-ring

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE
Druckring	Messing
Innentülle	Messing
O-Ring	NBR

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE
Thrust collar	brass
Ferrule	brass
O-ring	NBR

### EIGENSCHAFTEN

- hoher Staub- / Flüssigkeitsschutz
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest
- flüssigkeitsdichte EMV-Schutzverschraubung durch verlängerte Druckmutter

### PROPERTIES

- highly watertight and dust proof
- correct grounding
- covering of the conduit ends
- vibrationproof and tensionproof
- liquid tight emc connector due to longer pressure nut

AD  
OD



Technische Basisdaten USD-M  
Technical basic data USD-M

Ø	Metr. EN 60423	øB mm	C mm	D mm	SW1 mm	SW2 mm	kg 100
14	M 12 x 1,5	23,0	10,0	33,0	19	21	2,800
17	M 16 x 1,5	27,0	10,0	33,0	23	25	3,800
21	M 20 x 1,5	31,0	10,0	33,0	27	29	5,000
27	M 25 x 1,5	39,0	11,0	42,0	34	36	9,100
36	M 32 x 1,5	48,0	13,0	47,0	43	45	10,800
45	M 40 x 1,5	57,0	13,0	47,0	52	54	18,600
56	M 50 x 1,5	70,0	14,0	52,0	63	66	23,400

Technische Basisdaten USD-P  
Technical basic data USD-P

Ø	PG DIN 40430	øB mm	C mm	D mm	SW1 mm	SW2 mm	kg 100
14	9	23,0	7,0	30,0	19	21	2,800
17	11	27,0	7,0	30,0	23	25	3,700
19	13,5	29,0	7,0	30,0	25	27	4,980
21	16	31,0	7,0	30,0	27	29	4,800
27	21	39,0	10,0	41,0	34	36	9,000
36	29	48,0	10,0	44,0	43	45	9,700
45	36	57,0	10,0	44,0	52	54	20,000
56	48	70,0	10,0	48,0	63	66	21,000

# USD

## MONTAGEANLEITUNG

1. Schutzschlauch FLEXAgraff-CU-PU mit geeigneter Schneidvorrichtung trennen.
2. Verschraubung demontieren und Druckmutter über das Schutzschlauchende schieben.
3. TPE Dichtring mit abgeschrägter Seite in Richtung Druckmutter über den Schutzschlauch schieben.
4. Den Kunststoffmantel vorsichtig in der 1,5-fachen Breite des Messing-Druckrings abmanteln.
5. Überstehende CU-Flechtfäden mit einer Schere sauber und plan zum Schlauch entfernen.
6. EMV-Messingdruckring seiterrichtig mit gerader Seite gemäß Bildfolge auf den Schutzschlauch schieben.
7. Innentülle bis zum Anschlag in Schutzschlauch eindrehen (Hilfswerzeug auf Anfrage).
8. Verschraubungsgehäuse mit aufmontierten Teilen zusammenfügen und zur guten Kontaktierung mit Hilfe von Werkzeug (Maulschlüssel) fest verschrauben.

## ASSEMBLY INSTRUCTION

1. Cut the FLEXAgraff-CU-PU hose (emc-safe) with appropriate cutting tool.
2. Dismount connector and push pressure screw over protection hose.
3. Push the TPE sealing over the conduit with the inclined side facing the pressure screw.
4. Strip the plastic jacket off the conduit with care for the 1.5 fold width of the brass-thrust collar.
5. Cut any remaining CU braiding. Make sure it is a clean cut which leaves the braiding at the exact length of the hose.
6. Push the EMC brass thrust collar (cone formed end in the right direction) over the protective tube as shown in picture.
7. Screw ferrule into the protection hose until its end (auxiliary tool on demand).
8. Combine the connector body with the mounted parts and tighten the connection with a hexagon wrench for optimal contact.

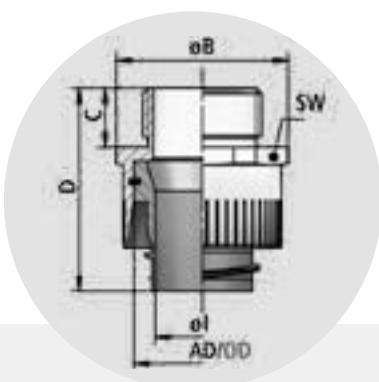
IP 67  
-40°C ... +125°C



AD OD		FLEXA NO.			
<b>USD – M</b>		FLEXAgraff®-CU-PU			
Ø	Metr. EN 60423	[IP 67]	mm	øl mm	St. pcs.
14	M 12 x 1,5	5015.327.012	11,0 x 15,0	9,0	10
17	M 16 x 1,5	5015.328.016	13,0 x 18,0	11,5	10
21	M 20 x 1,5	5015.328.020	17,0 x 21,0	15,5	10
27	M 25 x 1,5	5015.340.025	23,0 x 28,0	20,5	10
36	M 32 x 1,5	5015.328.032	29,0 x 37,0	27,5	2
45	M 40 x 1,5	5015.328.040	38,0 x 46,0	35,0	2
56	M 50 x 1,5	5015.328.050	49,0 x 57,0	45,0	2
<b>USD – P</b>		FLEXAgraff®-CU-PU			
Ø	PG DIN 40430	[IP 67]	mm	øl mm	St. pcs.
14	9	5015.127.009	11,0 x 15,0	10,0	10
17	11	5015.128.011	13,0 x 18,0	11,5	10
21	16	5015.128.016	17,0 x 22,0	15,5	10
27	21	5015.140.021	23,0 x 28,0	21,5	10
36	29	5015.128.029	29,0 x 37,0	27,5	2
45	36	5015.128.036	38,0 x 46,0	36,5	2
56	48	5015.128.048	49,0 x 57,0	47,5	2



IP 40  
-40°C ... +250°C



A Verschraubungsgehäuse  
connector body

B Innentülle  
ferrule

## LI

Metallverschraubung  
gerade, Außengewinde  
integrierte Innentülle, drehbar

### KONSTRUKTION

Rundes Verschraubungsgehäuse  
drehbar, Sechskantschlüsselfläche,  
Außengewinde metrisch nach  
EN 60423 oder PG nach DIN 40430  
einschnappbare Schlauchgewindetülle

### MATERIAL

Gehäuse	Messing vernickelt
Innentülle	Messing blank
Sicherungsring	Federstahl

### EIGENSCHAFTEN

- integrierte Schlauchausdrehsperrre
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### MONTAGE

Innentülle auf das Schlauchende drehen  
und danach in das Verschraubungs-  
gehäuse einstecken.

Metal connector  
straight, outer thread  
integrated ferrule, turnable

### STRUCTURE

Round connector body  
turnable, hexagonal wrench surface  
outer thread metric acc. to EN 60423  
or PG acc. to DIN 40430  
snap in threaded ferrule

### MATERIAL

Connector body	nickel-plated brass
Ferrule	polished brass
Locking ring	spring steel

### PROPERTIES

- integrated conduit screw out
- covering of the conduit ends
- vibrationproof and tensionproof

### ASSEMBLY

Screw the ferrule into the end of the  
conduit and push the connector body  
into the ferrule.

AD OD	FLEXA No.		FLEXA No.	

### LI-M

Kleine VPE  
small packing unit

Ø	Metr. EN 60423	[IP 40]	øl mm	øB mm	C mm	D mm	SW mm	kg 100	St. pcs.	St. pcs.	
10	M 10 x 1,0	5010.012.010	6,0	17,0	10,0	32,0	15	1,660	50	5010.712.010	10
14	M 12 x 1,5	5010.012.012	9,0	21,0	10,0	33,0	19	2,240	50	5010.712.012	10
17	M 16 x 1,5	5010.012.016	12,0	25,0	10,0	33,0	23	3,200	50	5010.712.016	10
21	M 20 x 1,5	5010.012.020	15,5	29,0	10,0	35,0	27	4,260	50	5010.712.020	10
27	M 25 x 1,5	5010.012.025	20,5	37,0	11,0	36,0	34	7,000	25	5010.712.025	10
36	M 32 x 1,5	5010.012.032	27,5	46,0	13,0	43,0	43	12,080	25	5010.712.032	2
45	M 40 x 1,5	5010.012.040	35,0	62,0	13,0	43,0	54	13,500	25	5010.712.040	2
56	M 50 x 1,5	5010.012.050	45,0	76,0	14,0	44,0	66	25,600	10	5010.712.050	2

### LI-P

Kleine VPE  
small packing unit

Ø	PG DIN 40430	[IP 40]	øl mm	øB mm	C mm	D mm	SW mm	kg 100	St. pcs.	St. pcs.	
10	7	5010.010.007	6,0	16,0	7,0	29,0	15	1,580	50	5010.710.007	10
14	9	5010.010.009	9,0	21,0	7,0	30,0	19	2,240	50	5010.710.009	10
17	11	5010.010.011	12,0	24,5	7,0	30,0	23	2,920	50	5010.710.011	10
19	13,5	5010.010.013	13,5	27,0	7,0	30,0	25	3,560	50	5010.710.013	10
21	16	5010.010.016	15,5	29,0	7,0	32,0	27	4,040	50	5010.710.016	10
27	21	5010.010.021	20,5	37,0	10,0	35,0	34	6,760	25	5010.710.021	10
36	29	5010.010.029	27,5	46,0	10,0	40,0	43	11,000	25	5010.710.029	2
45	36	5010.010.036	36,5	58,0	10,0	40,0	55	13,500	25	5010.710.036	2
56	48	5010.010.048	47,0	68,0	10,0	40,0	66	19,500	10	5010.710.048	2

# LIF

Metallverschraubung  
gerade  
Außengewinde

## KONSTRUKTION

Rundes Verschraubungsgehäuse  
mit Sechskantschlüsselfläche,  
feststehendes Außengewinde metrisch  
nach EN 60423 oder PG nach DIN 40430

## MATERIAL

Gehäuse      Messing vernickelt  
Abdeckhülse    Messing vernickelt

## EIGENSCHAFTEN

- integrierte Schlauchausdrehsperrre
- Abdeckung der Schlauchenden
- vibrations- und zugfest

## MONTAGE

Abdeckhülse auf das Schlauchende  
stecken und danach das Verschraubungs-  
gehäuse eindrehen

IP 40  
 -40°C ... +250°C

Metal connector  
straight  
outer thread

## STRUCTURE

Round connector body  
hexagonal wrench surface  
fixed outer thread metric acc. to  
EN 60423 or PG acc. to DIN 40430

## MATERIAL

Connector body    nickel-plated brass  
Cover sleeve     nickel-plated brass

## PROPERTIES

- integrated conduit screw out
- covering of the conduit ends
- vibrationproof and tensionproof

## ASSEMBLY

Push the cover sleeve on the end of the  
conduit and screw the connector body in  
the conduit

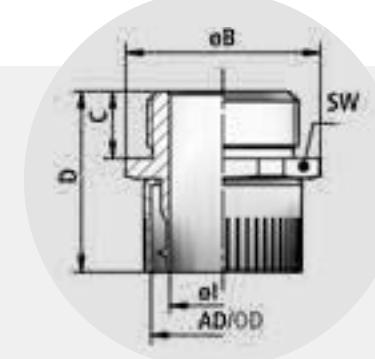


## LIF-M

AD OD		FLEXA No.					FLEXA No.		Kleine VPE small packing unit	
10	M 12 x 1,5	5801.310.012	5,9	16,0	10,0	26,0	15	1,550	50	5801.810.012 10
14	M 16 x 1,5	5801.314.016	8,9	21,0	10,0	27,0	19	2,400	50	5801.814.016 10
17	M 16 x 1,5	5801.317.016	11,0	25,0	10,0	27,0	23	3,000	50	5801.817.016 10
17	M 20 x 1,5	5801.317.020	12,0	25,0	10,0	27,0	23	2,900	50	5801.817.020 10
21	M 20 x 1,5	5801.321.020	15,0	29,0	10,0	27,0	27	3,800	50	5801.821.020 10
27	M 25 x 1,5	5801.327.025	20,0	37,0	11,0	30,5	34	6,300	25	5801.827.025 10
36	M 32 x 1,5	5801.336.032	27,5	45,6	13,0	33,0	43	8,100	25	5801.836.032 2
45	M 40 x 1,5	5801.345.040	35,0	59,0	13,0	33,0	54	13,300	25	5801.845.040 2
56	M 50 x 1,5	5801.356.050	45,0	69,0	14,0	34,0	66	18,500	10	5801.856.050 2

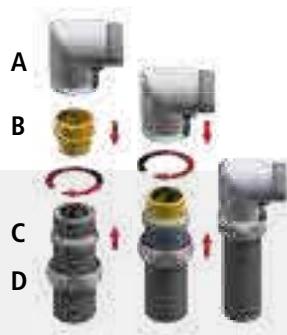
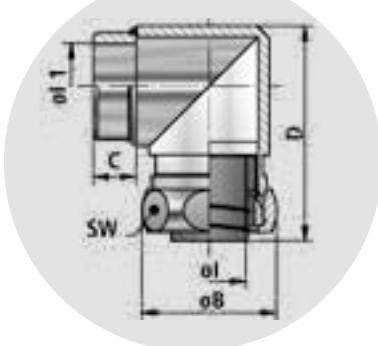
## LIF-P

Ø PG DIN 40430	[IP 40]	øl mm	øB mm	C mm	D mm	SW mm	kg 100	St. pcs.	St. pcs.	
10	7	5801.010.007	5,9	16,0	10,0	26,0	15	1,600	50	5801.410.007 10
14	9	5801.014.009	8,9	21,0	10,0	27,0	19	2,400	50	5801.414.009 10
17	11	5801.017.011	12,0	25,0	10,0	27,0	23	3,100	50	5801.417.011 10
19	13,5	5801.019.013	14,0	27,0	10,0	27,0	25	3,200	50	5801.419.013 10
21	16	5801.021.016	15,9	29,0	10,0	27,0	27	3,900	50	5801.421.016 10
27	21	5801.027.021	20,4	37,0	11,0	30,6	34	6,200	25	5801.427.021 10
36	29	5801.036.029	27,5	45,6	13,0	33,0	43	8,800	25	5801.436.029 2
45	36	5801.045.036	36,6	59,0	13,0	33,0	54	11,750	25	5801.445.036 2
56	48	5801.056.048	47,5	69,0	13,5	33,5	66	16,400	10	5801.456.048 2



A Verschraubungsgehäuse  
connector body  
B Abdeckhülse  
cover sleeve

IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring
- B Innentülle  
ferrule
- C Dichtring oder Messing-Druckring  
sealing ring or brass thrust collar
- D Druckmutter  
pressure nut

## USW-M

Metall-Sicherheitsverschraubung  
90° Winkel  
Außengewinde  
inkl. Innentülle, Dichtring oder  
Messing-Druckring [MSD] und O-Ring

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, zur Aufnahme der Innentülle aus Metall / Kunststoff

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Innentülle	Messing   Kunststoff
O-Ring	NBR

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### WICHTIG

Die Funktionssicherheit der Verschraubung ist nur mit entsprechender Innentülle gewährleistet. Für EMV-Verwendung bitte die Montageanleitung beachten.

Metal connector, safety-type  
90° elbow  
outer thread  
incl. ferrule, sealing or  
brass thrust collar [MSD] and O-ring

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423, hexagon pressure nut, plastic seal or brass thrust collar, to receive FLEXA ferrule made of metal / plastics

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Ferrule	brass   plastics
O-ring	NBR

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof

### IMPORTANT

The security of the connector is only guaranteed with the corresponding ferrule.  
For emc-usage please see our assembly instructions.

AD  
OD



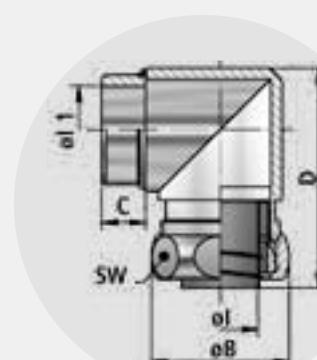
Technische Basisdaten USW-M  
Technical basic data USW-M

Ø	Metr. EN 60423	ØB mm	C mm	D mm	SW mm	kg 100
10	M 12 x 1,5	19,0	8,0	32,0	17	2,800
14	M 16 x 1,5	23,0	8,0	36,0	21	3,600
17	M 20 x 1,5	27,0	8,0	38,0	25	5,900
21	M 25 x 1,5	31,0	10,0	45,0	29	10,000
27	M 32 x 1,5	39,0	10,0	57,0	36	13,100
36	M 40 x 1,5	48,0	10,0	67,0	45	20,700
45	M 50 x 1,5	57,0	12,0	77,0	54	26,900
56	M 63 x 1,5	70,0	12,0	84,0	66	32,400

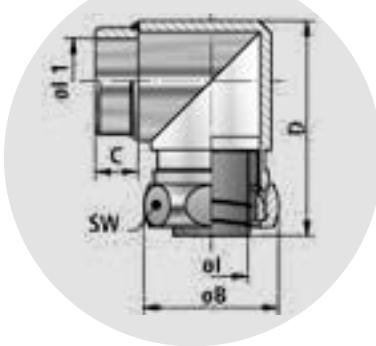
# USW-M

IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]

AD	OD	FLEXA No.		FLEXA No.	
		SPR-AS SPR-VA		SPR-PA SPR-PU-F SPR-PVC-AS SPR-PU-AS	
Ø	Metr.	[IP 40]	Øl mm	[IP 65]	Øl mm
	EN 60423				St. pcs.
10	M 12 x 1,5	: 5010.527.012	8 x 10	5010.528.012	7 x 10
14	M 16 x 1,5	: 5010.527.016	11 x 14	5010.528.016	10 x 14
17	M 20 x 1,5	: 5010.527.020	14 x 17	5010.528.020	13 x 17
21	M 25 x 1,5	: 5010.527.025	18 x 21	5010.528.025	17 x 21
27	M 32 x 1,5	: 5010.527.032	23 x 27	5010.528.032	22 x 27
36	M 40 x 1,5	: 5010.527.040	31 x 36	5010.528.040	29 x 36
45	M 50 x 1,5	: 5010.527.050	40 x 45	5010.528.050	38 x 45
56	M 63 x 1,5	: 5010.527.063	51 x 56	5010.528.063	49 x 56
					47,0
		FLEXAgraff®-AS FLEXAgraff®-VA		FLEXAgraff®-PU-AS FLEXAgraff®-PU-F	
Ø	Metr.	[IP 40]	Øl mm	[IP 65]	Øl mm
	EN 60423				St. pcs.
10	M 12 x 1,5	: 5010.527.012	8 x 10	5010.528.012	7 x 10
14	M 16 x 1,5	: 5010.539.016	12 x 14	5010.527.016	10 x 14
17	M 20 x 1,5	: 5010.527.020	14 x 17	5010.528.020	13 x 17
21	M 25 x 1,5	: 5010.527.025	18 x 21	5010.528.025	17 x 21
27	M 32 x 1,5	: 5010.539.032	24 x 27	5010.540.032	23 x 27
36	M 40 x 1,5	: 5010.527.040	31 x 36	5010.528.040	29 x 36
45	M 50 x 1,5	: 5010.527.050	40 x 45	5010.528.050	38 x 45
56	M 63 x 1,5	: 5010.527.063	51 x 56	5010.528.063	49 x 56
					47,0
		AIRflex®-KUW-PVC-AS AIRflex®-KUW-PU-AS AIRflex®-GRS [IP 65] AIRflex®-K		FLEXAgraff®-SI-ASF	
Ø	Metr.	[IP 54]	Øl mm	[IP 66]	Øl mm
	EN 60423				St. pcs.
10	M 12 x 1,5	: 5010.530.012	7 x 10	5010.537.016	10 x 14
14	M 16 x 1,5	: 5010.530.016	10 x 14	5010.537.020	12 x 17
17	M 20 x 1,5	: 5010.530.020	13 x 17	5010.535.025	16 x 21
21	M 25 x 1,5	: 5010.530.025	16 x 21	5010.501.032	21 x 27
27	M 32 x 1,5	: 5010.530.032	21 x 27	5010.537.040	27 x 36
36	M 40 x 1,5	: 5010.530.040	29 x 36	5010.537.050	36 x 45
45	M 50 x 1,5	: 5010.530.050	38 x 45	5010.537.063	47 x 56
56	M 63 x 1,5	: 5010.530.063	48 x 56		45,5
					2
		FLEXAgraff®-CU-AS		SPR-CU SPR-EDU-AS	
Ø	Metr.	[IP 40]	Øl mm	[IP 40]	Øl mm
	EN 60423				St. pcs.
10	M 12 x 1,5	: 5011.528.012	7 x 10	5011.528.012	7 x 10
14	M 16 x 1,5	: 5011.527.016	11 x 14	5011.528.016	10 x 14
17	M 20 x 1,5	: 5011.528.020	13 x 17	5011.528.020	13 x 17
21	M 25 x 1,5	: 5011.528.025	17 x 21	5011.528.025	17 x 21
27	M 32 x 1,5	: 5011.540.032	23 x 27	5011.528.032	22 x 27
36	M 40 x 1,5	: 5011.528.040	29 x 36	5011.528.040	29 x 36
45	M 50 x 1,5	: 5011.528.050	38 x 45	5011.528.050	38 x 45
56	M 63 x 1,5	: 5011.528.063	49 x 56	5011.528.063	51 x 56
					49,0
		AIRflex®-KUW-EDU		SPR-PVC-EDU-AS	
Ø	Metr.	[IP 54]	Øl mm	[IP 54]	Øl mm
	EN 60423				St. pcs.
14	M 16 x 1,5	: 5011.528.016	9 x 14	5011.528.016	10 x 14
17	M 20 x 1,5	: 5011.535.020	12 x 17	5011.535.020	12 x 17
21	M 25 x 1,5	: 5011.535.025	15 x 21	5011.535.025	16 x 21
27	M 32 x 1,5	: 5011.535.032	20 x 27	5011.501.032	21 x 27
36	M 40 x 1,5	: 5011.528.040	28 x 36	5011.528.040	28 x 36
45	M 50 x 1,5	: 5011.535.050	37 x 45	5011.535.050	37 x 45
56	M 63 x 1,5	: 5011.535.063	48 x 56	5011.535.063	48 x 56
					46,0
		AIRflex®-KUW-EDU		SPR-PVC-EDU-AS	



IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring
- B Innentülle  
ferrule
- C Dichtring oder Messing-Druckring  
sealing ring or brass thrust collar
- D Druckmutter  
pressure nut

## USW-P

Metall-Sicherheitsverschraubung  
90° Winkel  
Außengewinde  
inkl. Innentülle, Dichtring oder  
Messing-Druckring [MSD] und O-Ring

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, Anschlussgewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring oder Messing-Druckring, zur Aufnahme der Innentülle aus Metall / Kunststoff

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	TPE oder PTFE
Druckring	Messing
Innentülle	Messing   Kunststoff
O-Ring	NBR

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest

### WICHTIG

Die Funktionssicherheit der Verschraubung ist nur mit entsprechender Innentülle gewährleistet. Für EMV-Verwendung bitte die Montageanleitung beachten.

Metal connector, safety-type  
90° elbow  
outer thread  
incl. ferrule, sealing or  
brass thrust collar [MSD] and O-ring

### STRUCTURE

Connector body with hexagonal wrench surface, connecting thread metric acc. to EN 60423 hexagon pressure nut, plastic seal or brass thrust collar, to receive FLEXA ferrule made of metal / plastics

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	TPE or PTFE
Thrust collar	brass
Ferrule	brass   plastics
O-ring	NBR

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tensionproof

### IMPORTANT

The security of the connector is only guaranteed with the corresponding ferrule.  
For emc-usage please see our assembly instructions.

AD  
OD



Technische Basisdaten USW-P  
Technical basic data USW-P

Ø	PG DIN 40430	øB mm	C mm	D mm	SW mm	kg 100
10	7	19,0	9,0	36,0	17	2,800
14	9	23,0	9,0	41,0	21	3,600
17	11	27,0	9,0	45,0	25	5,900
19	13,5	29,0	10,0	49,5	27	7,700
21	16	31,0	10,0	52,0	29	10,000
27	21	39,0	10,5	58,0	36	13,400
36	29	48,0	11,0	72,0	45	23,300

# USW-P

IP 40 ... IP 66  
-40°C ... +125°C | +250°C [MSD]

AD OD	FLEXA No.		FLEXA No.	
	SPR-AS SPR-VA		SPR-PA SPR-PU-F SPR-PVC-AS SPR-PU-AS	
Ø DIN 40430	PG [IP 40]	mm	øl [IP 65]	mm St. pcs.
10	7	5010.227.007	8 x 10	6,5
14	9	5010.227.009	11 x 14	10,0
17	11	5010.227.011	14 x 17	12,5
19	13,5	5010.227.013	16 x 19	14,5
21	16	5010.227.016	18 x 21	16,5
27	21	5010.227.021	23 x 27	21,5
36	29	5010.227.029	31 x 36	29,5
	FLEXAgraff®-AS FLEXAgraff®-VA		FLEXAgraff®-PU-AS FLEXAgraff®-PU-F	
Ø DIN 40430	PG [IP 40]	mm	øl [IP 65]	mm St. pcs.
10	7	5010.227.007	8 x 10	6,5
14	9	5010.239.009	12 x 14	10,5
17	11	5010.227.011	14 x 17	12,5
19	13,5	5010.227.013	16 x 19	14,5
21	16	5010.227.016	18 x 21	16,5
27	21	5010.239.021	24 x 27	22,5
36	29	5010.227.029	31 x 36	29,5
	AIRflex®-KUW-PVC-AS AIRflex®-KUW-PU-AS AIRflex®-GRS [IP 65] AIRflex®-K		FLEXAgraff®-SI-ASF	
Ø DIN 40430	PG [IP 54]	mm	øl [IP 66]	mm St. pcs.
10	7	5010.230.007	7 x 10	6,0
14	9	5010.230.009	10 x 14	9,0
17	11	5010.230.011	13 x 17	11,5
19	13,5	5010.230.013	15 x 19	13,0
21	16	5010.230.016	16 x 21	14,5
27	21	5010.230.021	21 x 27	19,5
36	29	5010.230.029	29 x 36	26,5
	FLEXAgraff®-CU-AS		SPR-CU SPR-EDU-AS	
Ø DIN 40430	PG [IP 40]	mm	øl [IP 40]	mm St. pcs.
10	7	5011.228.007	7 x 10	6,0
14	9	5011.227.009	11 x 14	10,0
17	11	5011.228.011	13 x 17	11,5
19	13,5	5011.228.013	15 x 19	13,5
21	16	5011.228.016	17 x 21	15,5
27	21	5011.240.021	23 x 27	21,5
36	29	5011.228.029	29 x 36	27,5
	AIRflex®-KUW-EDU		SPR-PVC-EDU-AS	
Ø DIN 40430	PG [IP 54]	mm	øl [IP 54]	mm St. pcs.
14	9	5011.228.009	9 x 14	8,5
17	11	5011.235.011	12 x 17	11,0
19	13,5	5011.235.013	14 x 19	13,0
21	16	5011.235.016	15 x 21	14,5
27	21	5011.235.021	20 x 27	19,5
36	29	5011.228.029	28 x 36	27,5



IP 54  
-10°C ... +110°C

UL 1696  
UR file E86359  
CSA 22.2  
File No. 227.3-05



## USK

Kunststoffverschraubung  
gerade  
Außengewinde  
inkl. Innentülle und Dichtring  
UL-file E86359

Plastic connector  
straight  
outer thread  
incl. ferrule and sealing  
UL-file E86359

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche und Anschlussgewinde

### MATERIAL

Gehäuse	Kunststoff [PP]
Innentülle	Kunststoff [PP]
Dichtring	TPE

### STRUCTURE

Connector body with hexagonal wrench surface and connecting thread

### EIGENSCHAFTEN

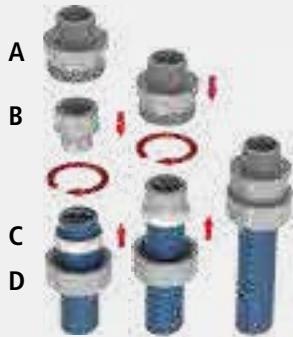
- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- vibrations- und zugfest

### MATERIAL

Connector body	plastics [PP]
Ferrule	plastics [PP]
Sealing ring	TPE

### PROPERTIES

- high dust- and waterproof
- friction-type locking of conduit and screw connector
- vibration and tension-proof



- A Verschraubungsgehäuse mit montiertem O-Ring  
connector body with mounted O-ring  
  
 B Innentülle  
ferrule  
  
 C Dichtring  
sealing ring  
  
 D Druckmutter  
pressure nut

AD	OD	FLEXA No.		FLEXA No.	
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### USK-M

Kleine VPE  
small packing unit

Ø	Metr. EN 60423	[IP 54]	øl mm	øB mm	C mm	D mm	SW1 mm	SW2 mm	kg 100	St. pcs.	St. pcs.
10	M 10 x 1,0	5020.330.010	6,0	20,0	10,0	40,0	16	18	0,340	50	5020.730.010 10
14	M 12 x 1,5	5020.330.012	8,0	25,0	12,0	43,0	21	23	0,660	50	5020.730.012 10
17	M 16 x 1,5	5020.330.016	11,0	30,0	12,0	43,0	24	27	0,880	50	5020.730.016 10
21	M 20 x 1,5	5020.330.020	15,0	35,0	13,0	44,0	29	32	1,220	50	5020.730.020 10
27	M 25 x 1,5	5020.330.025	20,0	44,0	13,0	50,0	36	40	2,400	25	5020.730.025 10
36	M 32 x 1,5	5020.330.032	27,0	54,0	15,0	51,0	45	49	3,120	25	5020.730.032 2
45	M 40 x 1,5	5020.330.040	35,0	63,0	15,0	51,0	54	58	3,920	25	5020.730.040 2
56	M 50 x 1,5	5020.330.050	44,5	77,0	16,0	58,0	66	70	6,200	10	5020.730.050 2
56	M 63 x 1,5	5020.330.063	44,5	77,0	16,0	58,0	66	70	8,800	10	5020.730.063 2

### USK-P

Kleine VPE  
small packing unit

Ø	PG DIN 40430	[IP 54]	øl mm	øB mm	C mm	D mm	SW1 mm	SW2 mm	kg 100	St. pcs.	St. pcs.
10	7	5020.130.007	6,0	20,0	10,0	40,0	16	18	0,350	50	5020.430.007 10
14	9	5020.130.009*	9,0	25,0	10,0	41,0	21	23	0,640	50	5020.430.009* 10
17	11	5020.130.011*	11,0	30,0	10,0	41,0	24	27	0,860	50	5020.430.011* 10
19	13,5	5020.130.013	13,0	32,0	10,0	41,0	26	29	0,980	50	5020.430.013 10
21	16	5020.130.016*	14,5	35,0	11,0	42,0	29	32	1,180	50	5020.430.016* 10
27	21	5020.130.021	19,5	44,0	11,0	48,0	36	40	2,240	25	5020.430.021 10
36	29	5020.130.029	27,0	54,0	12,0	48,0	45	49	3,120	25	5020.430.029 2
45	36	5020.130.036	36,0	63,0	12,0	48,0	53	58	4,040	25	5020.430.036 2
56	48	5020.130.048	46,0	77,0	15,0	57,0	65	70	6,300	10	5020.430.048 2

\* mit NEMKO-Approbation with NEMKO-Approval

# LKI

Kunststoffverschraubung  
gerade  
einteilig  
mit Anschlussgewinde drehbar  
UL-file E86359

## KONSTRUKTION

Rundes Verschraubungsgehäuse  
drehbares Anschlussgewinde mit  
integrierter Innentülle

## MATERIAL

schlagfester Kunststoff [PP]

## EIGENSCHAFTEN

- rationelle Schlauchmontage
- einteiliger Verschraubungskörper  
Schlauchausdrehschutz
- Abdeckung der Schlauchenden
- vibrations- und zugfest

Plastic connector  
straight  
one-part  
with turnable connecting thread  
UL-file E86359

IP 54  
-10°C ... +110°C

UL 1696  
UR file E86359  
CSA 22.2  
File No. 227.3-05



## STRUCTURE

Round connector body  
turnable connecting thread  
with fixed ferrule

## MATERIAL

resistant plastics [PP]

## PROPERTIES

- rational conduit fitting
- one-part connector body
- conduit screw-out-locking
- covering of the conduit ends
- vibrationproof and tensionproof



AD  
OD



FLEXA No.



FLEXA No.



## LKI-M

Kleine VPE  
small packing unit

Ø	Metr. EN 60423	[IP 54]	øl mm	øB mm	C mm	D mm	SW mm	kg 100	St. pcs.	St. pcs.	
10	M 12 x 1,5	5020.014.012	5,5	17,5	10,0	38,0	16	0,260	50	5020.714.012	10
14	M 16 x 1,5	5020.014.016	9,5	21,0	10,0	39,5	19	0,380	50	5020.714.016	10
17	M 20 x 1,5	5020.014.020	11,5	24,5	10,0	42,0	22	0,640	50	5020.714.020	10
21	M 25 x 1,5	5020.014.025	14,5	30,0	11,0	48,0	27	0,980	50	5020.714.025	10
27	M 32 x 1,5	5020.014.032	19,5	39,0	12,0	58,0	35	1,680	25	5020.714.032	10
36	M 40 x 1,5	5020.014.040	27,0	50,0	12,0	59,0	45	2,560	25	5020.714.040	2
45	M 50 x 1,5	5020.014.050	35,5	59,5	12,0	62,5	54	3,520	25	5020.714.050	2
56	M 63 x 1,5	5020.014.063	46,0	71,5	15,0	68,0	65	5,900	10	5020.714.063	2

## LKI-P

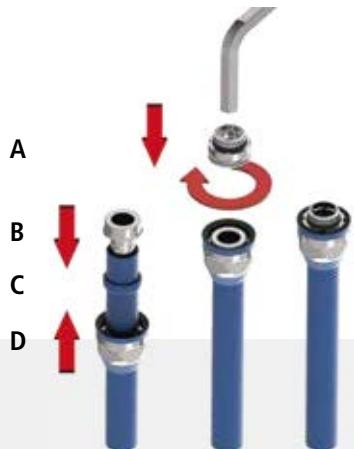
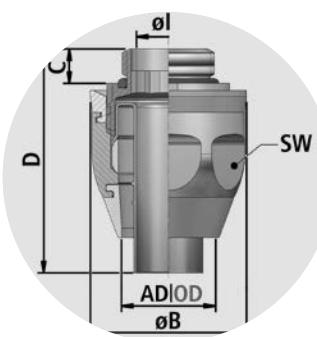
Ø	PG DIN 40430	[IP 54]	øl mm	øB mm	C mm	D mm	SW mm	kg 100	St. pcs.	St. pcs.	
10	7	5020.010.007	5,5	17,5	10,0	38,0	16	0,300	50	5020.710.007	10
14	9	5020.010.009	9,5	21,0	10,0	39,5	19	0,340	50	5020.710.009	10
17	11	5020.010.011	11,5	24,5	10,0	42,0	22	0,600	50	5020.710.011	10
19	13,5	5020.010.013	13,0	26,5	10,0	42,0	24	0,660	50	5020.710.013	10
21	16	5020.010.016	14,5	30,0	11,0	48,0	27	0,920	50	5020.710.016	10
27	21	5020.010.021	19,5	39,0	11,0	58,0	35	1,720	25	5020.710.021	10
36	29	5020.010.029	27,0	50,0	12,0	59,0	45	2,800	25	5020.710.029	2
45	36	5020.010.036	35,5	59,5	12,0	62,5	54	3,680	25	5020.710.036	2
56	48	5020.010.048	46,0	71,5	15,0	68,0	65	5,800	10	5020.710.048	2



\* mit NEMKO-Approbation with NEMKO-Approval

IP 68 | IP 69K  
-40°C ... +125°C

ECOLAB



A Verschraubungskörper mit montiertem O-Ring  
connector body with mounted O-ring

B Innentülle  
ferrule

C Dichtring  
sealing ring

D Druckmutter  
pressure nut

## US-FOOD

Metallverschraubung  
Edelstahl  
gerade  
Außengewinde  
inkl. Innentülle und O-ring

Metal connector  
stainless steel  
straight  
outer thread  
incl. ferrule and sealing

### KONSTRUKTION

Verschraubungsgehäuse mit Sechskantschlüsselfläche, feststehendes Außen-gewinde metrisch nach EN 60423, Sechskantdruckmutter, Kunststoff-Dichtring, einteilige Gewinde-Innentülle und O-Ring

### STRUCTURE

Connector body with hexagon wrench surface, fixed connecting outer thread metric acc to EN 60423, hexagon pressure nut, plastic sealing, one-part thread ferrule and O-ring

### MATERIAL

Gehäuse	Edelstahl Versaflex CL2250
Druckmutter	Edelstahl 1.4404
Dichtring	Kunststoff PA 6
Innentülle	Messing
O-Ring	NBR

### MATERIAL

Conn. Body	stainless steel Versaflex CL2250
Pressure nut	stainless steel 1.4404
Sealing ring	plastics PA 6
Ferrule	nickel-plated brass
O-ring	NBR

### EIGENSCHAFTEN

- lebensmittelecht
- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden
- vibrations- und zugfest
- IP 68 geprüft nach EN 60529 | IP 69K geprüft nach DIN 40050-9 [interne Prüfung] bis 40 bar, 80°C

### PROPERTIES

- food-safe
- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends
- vibration- and tension proof
- IP 68 approved acc. to EN 60529 | IP 69K approved acc. to DIN 40050-9 [internal audit] up to 40 bar, 80°C

### US-FOOD-M

Ø	Metr. EN 60423	[IP 68] mm	øl mm	øB mm	C mm	D mm	SW mm	SW mm	kg 100	St. pcs.
1/2"	M 20 x 1,5	0608.800.020	16,0 x 21,0	14,0	34,0	7,5	48,5	30	14	7,040
1/2"	M 25 x 1,5	0608.800.125	16,0 x 21,0	14,0	41,0	7,5	49,5	36	14	11,510
3/4"	M 25 x 1,5	0608.800.025	21,0 x 27,0	18,8	41,0	7,5	58,0	36	19	10,010
1"	M 32 X 1,5	0608.800.032	26,5 x 33,0	27,8	53,0	7,5	68,0	46	25	19,325
1 1/4"	M 40 X 1,5	0608.800.040	35,0 x 42,0	32,0	61,0	7,5	80,0	54	32	29,295

**EG**

Metallverschraubung  
gerade  
Außengewinde  
inkl. Innentülle und Dichtring

**KONSTRUKTION**

Verschraubungsgehäuse mit Sechskantschlüsselfläche, feststehendes Anschlussgewinde, Sechskantdruckmutter, Kunststoff-Dichtring, einteilige Gewinde-Innentüllle, abgestimmt auf die amerikanischen und kanadischen Handelsgrößen

**MATERIAL**

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	Elastischer Kunststoff
Innentülle	Messing

**EIGENSCHAFTEN**

- hoher Staub- / Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden

IP 67  
-45°C ... +105°C

Metal connector  
straight  
outer thread  
incl. ferrule and sealing

**STRUCTURE**

Connector body, hexagon wrench surface, connecting thread with hexagon pressure nut, plastic sealing and one-part thread ferrule, according to US and Canadian commercial sizes

**MATERIAL**

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	elastic plastics
Ferrule	brass

**PROPERTIES**

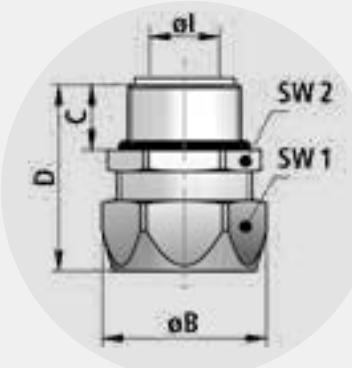
- highly watertight and dustproof
- friction-type locking of conduit and connector
- correct grounding
- covering of the conduit ends



AD	OD	FLEXA No.	mm	øl	øB	C	D	SW 1	SW 2	kg 100	St.
1/4"	M 12 x 1,5	0608.000.112	7,0 x 11,4	5,2	24,5	10,0	33,0	22	20	4,800	10
5/16"	M 16 x 1,5	0608.000.116	10,0 x 14,5	8,3	29,0	12,0	35,0	26	24	4,800	10
3/8"	M 16 x 1,5	0608.000.016	12,5 x 18,0	10,2	29,0	12,0	35,0	26	24	4,800	10
5/16"	M 20 x 1,5	0608.000.120	10,0 x 14,5	8,3	29,0	13,0	36,0	26	24	5,100	10
3/8"	M 20 x 1,5	0608.000.020	12,5 x 18,0	10,2	29,0	13,0	36,0	26	24	5,100	10
1/2"	M 20 x 1,5	0608.000.021	16,0 x 21,0	13,9	32,7	13,0	37,0	29	27	5,900	10
3/4"	M 25 x 1,5	0608.000.025	21,0 x 26,5	18,5	38,7	15,0	40,0	35	33	7,900	5
1"	M 32 x 1,5	0608.000.032	26,5 x 33,0	23,8	50,0	15,0	46,0	45	43	17,500	5
1 1/4"	M 40 x 1,5	0608.000.040	35,5 x 42,0	31,8	60,0	16,0	52,0	54	52	27,900	2
2"	M 63 x 1,5	0608.000.063	51,5 x 60,0	47,8	85,0	20,0	66,0	77	74	73,500	2

**EG-P**

Ø	PG	DIN 40430	[IP 67]	mm	øl	øB	C	D	SW 1	SW 2	kg 100	St.
1/4"	7	0610.000.007	7,0 x 11,4	5,2	24,5	10,0	33,0	22	20	3,000	10	
5/16"	9	0610.000.009	10,0 x 14,5	8,3	29,0	12,0	35,0	26	24	4,800	10	
3/8"	11	0610.000.011	12,5 x 18,0	10,2	29,0	12,0	35,0	26	24	5,520	10	
3/8"	13,5	0610.000.013	12,5 x 18,0	10,2	29,0	12,0	35,0	26	24	5,320	10	
1/2"	16	0610.000.016	16,0 x 21,0	13,9	32,7	13,0	37,0	29	27	8,080	10	
3/4"	21	0610.000.021	21,0 x 26,5	18,5	38,7	15,0	40,0	35	33	11,800	5	
1"	29	0610.000.029	26,5 x 33,0	23,8	50,0	15,0	46,0	45	43	20,600	5	
1 1/4"	36	0610.000.036	35,5 x 42,0	31,8	60,0	16,0	52,0	54	52	38,800	2	
2"	48	0610.000.048	51,5 x 60,0	47,8	85,0	20,0	66,0	77	74	66,000	2	



IP 67  
-45°C ... +105°C

## EW 45

Metallverschraubung  
Winkel 45°  
Außengewinde  
inkl. Innentülle und Dichtung

Metal connector  
elbow 45°  
outer thread  
incl. ferrule and sealing

### KONSTRUKTION

Verschraubungsgehäuse in 45° Winkel-ausführung mit Sechskantschlüsselfläche, feststehendes Anschlussgewinde, Sechskantdruckmutter, Kunststoff-Dichtring, einteilige Gewinde-Innentülle, abgestimmt auf die amerikanischen und kanadischen Handelsgrößen

### STRUCTURE

Connector body of 45°-angle version, hexagon wrench surface with conduit connecting thread, hexagon pressure nut, plastic sealing, one-part thread ferrule, according to US and Canadian commercial sizes

### MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	Elastischer Kunststoff
Innentülle	Messing

### MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	elastic plastics
Ferrule	brass

### EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden

### PROPERTIES

- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends

### EW 45-M

Ø	Metr. EN 60423	[IP 67]	øl mm	øB mm	C mm	D mm	SW 1 mm	SW 2 mm	kg/100	St. pcs.
5/16"	M 16 x 1,5	0609.000.116	10,0 x 14,5	8,3	29,0	12,0	57,0	26	22	7,300
3/8"	M 16 x 1,5	0609.000.016	12,5 x 18,0	10,2	29,0	12,0	57,0	26	22	7,300
5/16"	M 20 x 1,5	0609.000.120	10,0 x 14,5	8,3	29,0	13,0	57,0	26	22	7,400
3/8"	M 20 x 1,5	0609.000.020	12,5 x 18,0	10,2	29,0	12,0	57,0	26	22	7,400
1/2"	M 20 x 1,5	0609.000.021	16,0 x 21,0	13,9	32,7	13,0	60,0	29	27	10,500
3/4"	M 25 x 1,5	0609.000.025	21,0 x 26,5	18,5	38,7	15,0	70,5	35	33	13,600
1"	M 32 x 1,5	0609.000.032	26,5 x 33,0	23,8	50,0	15,0	84,5	45	42	26,500
1 1/4"	M 40 x 1,5	0609.000.040	35,5 x 42,0	31,8	60,0	16,0	98,0	54	51	44,900
2"	M 63 x 1,5	0609.000.063	51,5 x 60,0	47,8	85,0	20,0	133,5	77	74	128,000

### EW 45-P

Ø	PG DIN 40430	[IP 67]	øl mm	øB mm	C mm	D mm	SW 1 mm	SW 2 mm	kg/100	St. pcs.
5/16"	11	0611.000.111	10,0 x 14,5	8,3	29,0	12,0	57,0	26	22	7,700
3/8"	11	0611.000.011	12,5 x 18,0	10,2	29,0	12,0	57,0	26	22	7,700
5/16"	13,5	0611.000.113	10,0 x 14,5	8,3	29,0	12,0	57,0	26	22	8,100
3/8"	13,5	0611.000.013	12,5 x 18,0	10,2	29,0	12,0	57,0	26	22	8,100
1/2"	16	0611.000.016	16,0 x 21,0	13,9	32,7	13,0	60,0	29	27	11,600
3/4"	21	0611.000.021	21,0 x 26,5	18,5	38,7	15,0	70,0	35	33	16,600
1"	29	0611.000.029	26,5 x 33,0	23,8	50,0	15,0	75,0	45	42	31,500
1 1/4"	36	0611.000.036	35,5 x 42,0	31,8	60,0	16,0	98,0	54	51	53,200
2"	48	0611.000.048	51,5 x 60,0	47,8	85,0	20,0	134,0	77	74	132,000

# EW 90

Metallverschraubung  
Winkel 90°  
Außengewinde  
inkl. Innentülle und Dichtring

## KONSTRUKTION

Verschraubungsgehäuse in 90° Winkel-ausführung mit Sechskantschlüsselfläche, feststehendes Anschlussgewinde, Sechskantdruckmutter, Kunststoff-Dichtring, einteilige Gewinde-Innentülle, abgestimmt auf die amerikanischen und kanadischen Handelsgrößen

## MATERIAL

Gehäuse	Messing vernickelt
Druckmutter	Messing vernickelt
Dichtring	Elastischer Kunststoff
Innentülle	Messing

## EIGENSCHAFTEN

- hoher Staub- und Flüssigkeitsschutz
- kraftschlüssige Verbindung von Schlauch und Verschraubung
- einwandfreie Erdung
- Abdeckung der Schlauchenden

IP 67  
-45°C ... +105°C

Metal connector  
elbow 90°  
outer thread  
incl. ferrule and sealing

## STRUCTURE

Connector body of 45°-angle version  
hexagon wrench surface with  
conduit connecting thread,  
hexagon pressure nut, plastic sealing,  
one-part thread ferrule, according to  
US and Canadian commercial sizes

## MATERIAL

Connector body	nickel-plated brass
Pressure nut	nickel-plated brass
Sealing ring	elastic plastics
Ferrule	brass

## PROPERTIES

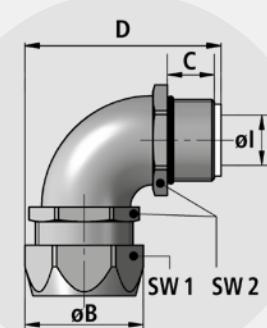
- highly watertight and dustproof
- friction-type locking of conduit and screw connector
- correct grounding
- covering of the conduit ends



AD	OD	FLEXA No.	Icon

## EW 90-M

Ø	Metr. EN 60423	[IP 67]	øl mm	øB mm	C mm	D mm	SW 1 mm	SW 2 mm	kg 100	St. pcs.
5/16"	M 16 x 1,5	0607.000.116	10,0 x 14,5	8,3	29,0	12,0	57,0	26	22	8,200
3/8"	M 16 x 1,5	0607.000.016	12,5 x 18,0	10,2	29,0	12,0	49,0	26	22	8,200
5/16"	M 20 x 1,5	0607.000.120	10,0 x 14,5	8,3	29,0	13,0	57,0	26	22	8,400
3/8"	M 20 x 1,5	0607.000.020	12,5 x 18,0	10,2	29,0	13,0	49,0	26	22	8,400
1/2"	M 20 x 1,5	0607.000.021	16,0 x 21,0	13,9	32,7	13,0	54,0	29	27	12,600
3/4"	M 25 x 1,5	0607.000.025	21,0 x 26,5	18,5	38,7	15,0	65,0	35	33	19,200
1"	M 32 x 1,5	0607.000.032	26,5 x 33,0	24,3	50,0	15,0	75,0	45	42	31,600
1 1/4"	M 40 x 1,5	0607.000.040	35,5 x 42,0	31,8	60,0	16,0	90,0	54	51	56,100
2"	M 63 x 1,5	0607.000.063	51,5 x 60,0	47,8	85,0	20,0	120,0	77	74	139,800



## EW 90-P

Ø	PG DIN 40430	[IP 67]	øl mm	øB mm	C mm	D mm	SW 1 mm	SW 2 mm	kg 100	St. pcs.
5/16"	11	0612.000.111	10,0 x 14,5	8,3	29,0	12,0	57,0	26	22	8,900
3/8"	11	0612.000.011	12,5 x 18,0	10,2	29,0	12,0	49,0	26	22	8,900
5/16"	13,5	0612.000.113	10,0 x 14,5	10,5	29,0	12,0	57,0	26	22	8,900
3/8"	13,5	0612.000.013	12,5 x 18,0	10,2	29,0	12,0	49,0	26	22	8,900
1/2"	16	0612.000.016	16,0 x 21,0	13,9	32,7	13,0	54,0	29	27	13,500
3/4"	21	0612.000.021	21,0 x 26,5	18,5	38,7	15,0	65,0	35	33	21,600
1"	29	0612.000.029	26,5 x 33,0	23,8	50,0	15,0	75,0	45	42	35,300
1 1/4"	36	0612.000.036	35,5 x 42,0	31,8	60,0	16,0	90,0	54	51	62,500
2"	48	0612.000.048	51,5 x 60,0	47,8	85,0	20,0	120,0	77	74	141,900



## NIMS

IP 54 ... IP 65  
-40°C ... +250°C

Metall-Schlaucholive  
Sechskantschlüsselfläche  
feststehendes Anschlussgewinde  
inkl. O-Ring

Metal conduit olive  
hexagon wrench surface  
fixed outer thread  
incl. O-Ring

### MATERIAL

Messing vernickelt

### MATERIAL

nickel-plated brass

AD  
OD



### FLEXA No.

#### NIMS-M

#### K-EDU K-Schlauch

#### HG-CU | HG-K

#### FLEXAhightemp

Ø	Metr. EN 60423	øl mm	øC mm	øD mm	E mm	F mm	SW mm	kg 100	St. pcs.
14	M 12 x 1,5	5010.023.012	7,0	9,0	15,5	6,4	29,0	14	1,380
17	M 16 x 1,5	5010.023.016	10,0	12,0	19,0	6,5	29,0	17	2,300
19	M 20 x 1,5	5010.023.020	12,0	14,0	24,3	6,5	29,0	22	3,400
21	M 25 x 1,5	5010.023.025	14,0	16,0	30,1	6,5	29,0	27	4,400
27	M 32 x 1,5	5010.023.032	19,0	21,0	39,1	6,5	32,1	35	8,600
36	M 40 x 1,5	5010.023.040	27,0	29,0	51,0	7,5	39,0	43	10,800
45	M 50 x 1,5	5010.023.050	35,0	37,1	59,5	10,0	47,0	54	15,000
56	M 63 x 1,5	5010.023.063	46,0	54,0	70,0	10,0	50,1	65	33,000

#### NIMS-P

Ø	PG DIN 40430	øl mm	øC mm	øD mm	E mm	F mm	SW mm	kg 100	St. pcs.
14	9	5010.022.009	7,0	9,0	21,0	6,0	29,0	19	2,120
17	11	5010.022.011	10,0	12,0	24,0	6,0	29,0	22	3,200
19	13,5	5010.022.013	12,0	14,0	24,0	6,0	29,0	24	2,940
21	16	5010.022.016	14,0	16,0	26,0	6,0	29,0	24	3,500
27	21	5010.022.021	19,0	21,0	35,5	6,0	29,0	32	5,000
36	29	5010.022.029	27,0	29,0	44,0	8,0	39,0	41	13,930
45	36	5010.022.036	34,0	36,0	54,0	9,0	41,0	50	14,200

-40°C ... +120°C

Schlauchschelle  
passend zu Schlaucholive NIMS

Conduit clamp  
suitable for conduit olive NIMS

### MATERIAL

Stahlblech verzinkt

### MATERIAL

galvanized steel



## SGL

AD  
OD

### FLEXA No.

### Klemmbereich fixing range

### Breite width



#### SGL

Ø	mm	mm	kg 100	St. pcs.
14 - 17	0340.000.020	12 - 20	9,0	1,400
19 - 21	0340.000.025	16 - 25	9,0	1,500
27 - 36	0340.000.040	25 - 40	9,0	1,700
45 - 56	0340.000.060	40 - 60	9,0	2,600



# MSD

Messing-Druckring  
für Verschraubungen US

## MATERIAL

Messing

## VERWENDUNG

- zur Erdung
- als Potentialausgleich für Schlauch-Verschraubungskombinationen im EMV-Einsatz

... +250°C

Brass thrust collar  
for connectors US

## MATERIAL

brass

## APPLICATION

- for grounding
- as potential equalization by use of conduits with metal braiding for shielding applications

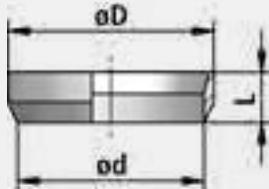


## AD      FLEXA No.



## MSD

Ø		øD mm	ød mm	L mm	kg/100	St. pcs.
10	5031.034.007	13,0	10,2	5,0	0,160	50
14	5031.034.009	17,0	14,5	5,0	0,180	50
17	5031.034.011	21,0	17,2	5,0	0,320	50
19	5031.034.013	23,0	19,2	6,0	0,360	50
21	5031.034.016	25,0	21,3	6,0	0,400	50
27	5031.034.021	32,0	27,3	8,5	1,240	25
36	5031.034.029	41,0	36,3	8,5	1,400	25
45	5031.034.036	50,0	45,3	8,5	1,760	20
56	5031.034.048	61,0	56,3	8,5	2,200	10



# TED

-60°C ... +300°C

Dichtring  
für Typ  
US | FLEXAgraff®-SI-ASF

Sealing ring  
for type  
US | FLEXAgraff®-SI-ASF

## MATERIAL

PTFE

## MATERIAL

PTFE

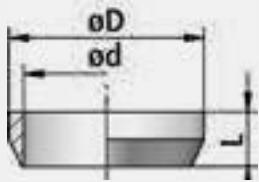


## AD      FLEXA No.



## TED

Ø		øD mm	ød mm	L mm	kg/100	St. pcs.
10	5030.013.010	13,0	10,3	6,0	0,054	50
14	5030.013.014	17,0	14,3	6,0	0,070	50
17	5030.013.017	21,0	17,3	6,0	0,120	50
21	5030.013.021	25,0	21,3	7,0	0,160	50
27	5030.013.027	32,0	27,4	9,5	0,400	25
36	5030.013.036	41,0	36,4	9,5	0,480	25
45	5030.013.045	50,0	45,4	9,5	0,600	20
56	5030.013.056	61,0	56,5	9,5	0,800	10



**EK**
 -10°C ... +110°C

Zylindrische Kunststoff-Endtülle mit nach innen gezogenem Schutzrand zur Abdeckung der Schlauchenden

Cylindric plastic terminal sleeve with protective edges to cover the conduit ends

**MATERIAL**

Polypropylen

**VERWENDUNG**

- für alle Schlauchtypen aus Metall und Kunststoff

**MATERIAL**

polypropylene

**APPLICATION**

- for all protective conduit types made of metal and plastic

AD  
OD

FLEXA No.

**EK**

grau grey

Ø		mm	kg 100	St. pcs.
10	5020.021.007	10,0	0,060	50
14	5020.021.009	14,0	0,120	50
17	5020.021.011	17,0	0,150	50
19	5020.021.013	19,0	0,155	50
21	5020.021.016	21,0	0,170	50
27	5020.021.021	27,0	0,340	25
36	5020.021.029	36,0	0,890	25
45	5020.021.036	45,0	0,960	25
56	5020.021.048	56,0	1,400	10

**AK**
 -40°C ... +120°C ^ +150°C

Endtülle | Übergangsstücke von Schlauch zu Kabel

End cap | transition from tubing to cable

**MATERIAL**

TPE

**EIGENSCHAFTEN**

- rationeller Schlauchendenabschluss, durch einfaches Aufstecken montiert
- aufsteckbar auf alle Schutzschläuche
- silikon-, cadmium-, halogenfrei
- selbstverlöschend

**MATERIAL**

TPE

**PROPERTIES**

- easy mounting cap
- easy to plug on all protective conduits
- free of silicone-, cadmium-, halogen
- self-extinguishing

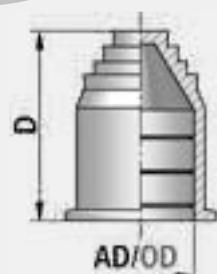
AD  
OD

FLEXA No.

**AK**

schwarz black

Ø	min Ø - max. Ø mm	D mm	kg 100	St. pcs.
10	5030.014.207	1,0 - 8,0	0,160	50
14	5030.014.209	1,0 - 10,0	0,220	50
17	5030.014.211	4,0 - 12,0	0,340	50
21	5030.014.216	6,0 - 16,5	0,560	50
27	5030.014.221	6,0 - 23,0	0,800	25
36	5030.014.229*	6,0 - 29,0	1,480	25
45	5030.014.236*	10,0 - 37,0	1,480	25
56	5030.014.248*	10,0 - 47,0	2,200	10



\* Lieferzeit auf Anfrage Delivery time on request

# EEM

Endtülle | Innentülle

## MATERIAL

Messing - für ummantelte Schutzschläuche  
Messing vernickelt - für nicht ummantelte Schutzschläuche

## VERWENDUNG

- für US- und USW-Verschraubungen
- als Endtülle an Schutzschläuchen

-40°C ... +250°C

Terminal sleeve | ferrule

## MATERIAL

brass - for conduits with sheathing  
nickel-plated brass - for conduits without sheathing

## APPLICATION

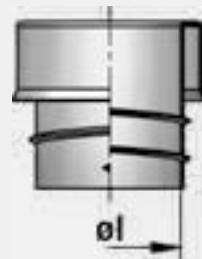
- for connectors US and USW
- as terminal sleeve for protective conduits



AD	FLEXA No.			FLEXA No.			FLEXA No.				
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<b>EEM</b>	SPR-AS	SPR-PA	FLEXAgraff®-AS
	SPR-VA	SPR-PU-F	FLEXAgraff®-VA
		SPR-PVC-AS	
		SPR-PU-AS	
		SPR-EDU-AS	
		SPR-CU-AS	

Ø	Øl	Øl	Øl	Øl	kg 100	St.	
mm	mm	mm	mm	mm	St.	pcs.	
10 : 5031.027.007	8 x 10	6,5	5031.028.007	7 x 10	6,0	0,160	50
14 : 5031.027.009	11 x 14	10,0	5031.028.009	10 x 14	8,5	0,300	50
17 : 5031.027.011	14 x 17	12,5	5031.028.011	13 x 17	11,5	0,320	50
19 : 5031.027.013	16 x 19	14,5	5031.028.013	15 x 19	13,5	0,420	50
21 : 5031.027.016	18 x 21	16,5	5031.028.016	17 x 21	15,5	0,520	50
27 : 5031.027.021	23 x 27	21,5	5031.028.021	22 x 27	20,5	1,120	25
36 : 5031.027.029	31 x 36	29,5	5031.028.029	29 x 36	27,5	1,640	25
45 : 5031.027.036	40 x 45	38,0	5031.028.036	38 x 45	36,5	2,450	20
56 : 5031.027.048	51 x 56	49,0	5031.028.048	49 x 56	47,5	3,800	10



<b>EEM</b>	FLEXAgraff®-PU-AS	SPR-PVC-EDU-AS	AIRflex®-KUW-EDU
	FLEXAgraff®-PU-F		
	FLEXAgraff®-CU-AS		
	FLEXAgraff®-CU-PU		

Ø	Øl	Øl	Øl	Øl	kg 100	St.	
mm	mm	mm	mm	mm	St.	pcs.	
10 : 5031.028.007	7 x 10	6,0			0,160	50	
14 : 5031.027.009	11 x 14	10,0	5031.028.009	9 x 14	8,5	0,300	50
17 : 5031.028.011	13 x 17	11,5	5031.035.011	12 x 17	11,0	0,320	50
19 : 5031.028.013	15 x 19	13,5	5031.035.013	14 x 19	13,0	0,420	50
21 : 5031.028.016	17 x 21	15,5	5031.035.016	16 x 21	14,5	0,520	50
27 : 5031.040.021	23 x 27	21,5	0601.000.021	21 x 27	19,5	1,120	25
36 : 5031.028.029	29 x 36	27,5	5031.037.029	28 x 36	27,5	1,640	25
45 : 5031.028.036	38 x 45	36,5	5031.035.036	37 x 45	35,5	2,450	20
56 : 5031.028.048	49 x 56	47,5	5031.035.048	48 x 56	47,0	3,800	10

<b>EEM</b>	FLEXAgraff®-SI-ASF		





## EE

-40°C ... +250°C

Endtülle | Innentüllle

### MATERIAL

Messing

### VERWENDUNG

- als Endtülle an Schutzschläuchen

Terminal sleeve | ferrule

### MATERIAL

brass

### APPLICATION

- as terminal sleeve for protective conduits

AD  
OD

### FLEXA No.



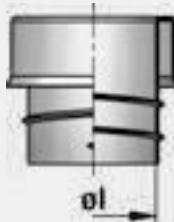
EE

LIQUID-TIGHT-EF  
LIQUID-TIGHT-EF-OR

LIQUID-TIGHT-UL-CSA

Ø		mm	øl	kg 100	St. pcs.
5/16"	5031.028.009	10,0 x 14,5	8,5	0,300	50
3/8"	0601.000.011	12,5 x 18,0	11,0	0,300	50
1/2"	0601.000.016	16,0 x 21,0	14,5	0,700	50
3/4"	0601.000.021	21,0 x 26,5	19,5	1,000	25
1"	0601.000.029	26,5 x 33,0	25,0	1,500	25
1 1/4"	0601.000.036	35,5 x 42,0	33,0	1,900	20
2"	0601.000.048	50,0 x 60,0	48,5	2,800	10

\* Lieferzeit auf Anfrage Delivery time on request



## EK

-10°C ... +110°C

Endtülle | Innentüllle

### MATERIAL

Kunststoff

### VERWENDUNG

- für USK-Verschraubungen
- als Endtülle an AIRflex®-Schutzschläuchen

Terminal sleeve | ferrule

### MATERIAL

plastics

### APPLICATION

- for connectors USK
- as terminal sleeve for AIRflex® protective conduits

AD  
OD

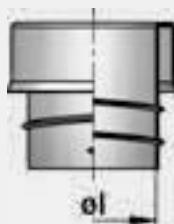
### FLEXA No.



EK

AIRflex®-KUW-PVC-AS  
AIRflex®-KUW-PU-AS  
AIRflex®-GRS  
AIRflex®-K

Ø		mm	øl	kg 100	St. pcs.
10	5020.030.007	7 x 10	6,0	0,040	50
14	5020.030.009	10 x 14	9,0	0,060	50
17	5020.030.011	13 x 17	11,5	0,100	50
19	5020.030.013	15 x 19	13,0	0,120	50
21	5020.030.016	16 x 21	14,5	0,140	50
27	5020.030.021	21 x 27	19,5	0,200	25
36	5020.030.029	29 x 36	26,5	0,400	25
45	5020.030.036	38 x 45	36,0	0,600	20
56	5020.030.048	48 x 56	45,5	0,770	10



## MONTAGEHILFEN | TRENNHILFEN

### MOUNTING AND PARTING TOOLS

**SCHLAUCHTRENNSCHERE**

Zum Schneiden von  
Metallschlauch

**CONDUIT SEPARATING SHEARS**

For cutting of  
metal conduits

**FLEXA No.**

Longueur  
length

mm



St.  
pcs.

0432.000.001

175

1

**TÜLLENEINDREHER**

Zum Einschrauben der Tüllen  
in den Schlauch

**BELL FITTING DRIVER**

For screwing the sleeves  
into the conduit

**FLEXA No.**

AD  
OD

mm



St.  
pcs.

0410.000.007\*

10 - 21

1

0410.000.021\*

27 - 56

1

**MONTAGEZANGE**

Zur Montage des Messing-Druckrings auf  
einen umflochtenen Schlauch

**CIRCLIP PLIERS**

For easy mounting the  
brass thrust collar on the conduit

**FLEXA No.**

AD  
OD

mm



St.  
pcs.

0420.000.007\*

10

1

0420.000.009\*

14

1

0420.000.011\*

17

1

0420.000.013\*

19

1

0420.000.016\*

21

1

0420.000.021\*

27

1

0420.000.029\*

36

1

0420.000.036\*

45

1

0420.000.048\*

56

1



\* Lieferzeit auf Anfrage Delivery time on request