



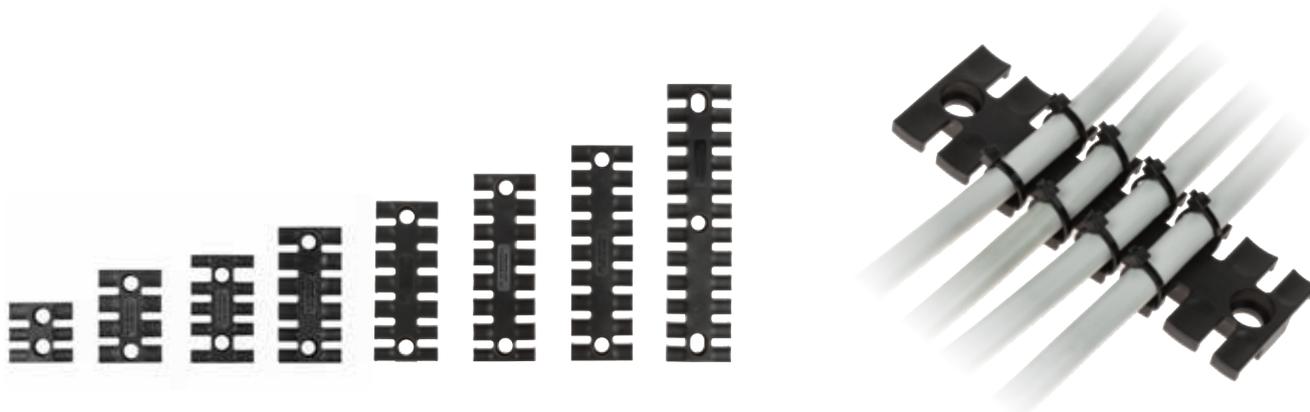
GROUP 3

Strain relief modules





Strain relief modules - screw fixing



FEATURES

- Modules also available with aluminum or brass bushings
- Strain relief acc. to EN 62444
- Easy to install
- Cost efficient solution
- UL94-V0

The AP modules are used in electrical switchboards and equipment in order to keep the cables tidy whilst providing strain relief according to EN 62444.

The cables can be fixed with standard plastic ties or reusable velcro ties. Spacers are available for multi-tier applications.

Material: PA66, halogens and silicones free

Flammability: self-extinguishing acc. to UL94-V0

Temperature: -40°C... +140°C (static)

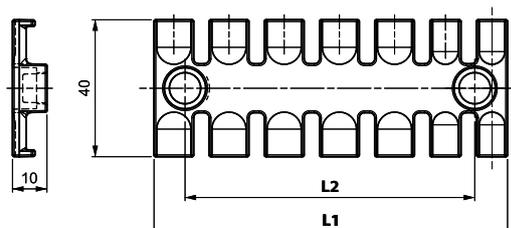
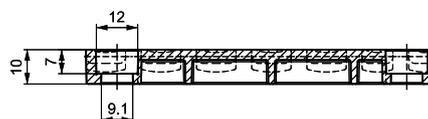
RELATED PRODUCTS

- DZ spacers (page 99)
- FV cable ties (page 103)

Modules without bushings

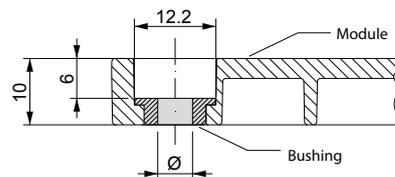
Model	Code	Dimensions (mm)		Teeth	Pcs (/pack)
		L1	L2		
AP 39	1733020003	38,5	19,5	3	10
AP 60	1733020004	59,5	43,5	4	
AP 70	1733020005	69,1	43,5	5	
AP 87	1733020006	86,5	68	6	
AP 103	1733020007	102,5	84	7	
AP 121	1733020008	121	102,5	8	
AP 140	1733020009	139,5	121	9	
AP 180	1733020010	180	157	12	

Dimensions (mm)





Strain relief modules - screw fixing



Modules with aluminum bushings

Modules with brass bushings

Model	Code	Bushing	Model	Code	Bushing	Dimensions (mm)		Teeth	Pcs (/pack)
						L1	L2		
AP 39 BA4	1733021403	Ø 4 mm	AP 39 BR4	1733022403	Ø 4 mm	38,5	19,5	3	10
AP 60 BA4	1733021404		AP 60 BR4	1733022404		59,5	43,5	4	
AP 70 BA4	1733021405		AP 70 BR4	1733022405		69,1	43,5	5	
AP 87 BA4	1733021406		AP 87 BR4	1733022406		86,5	68	6	
AP 103 BA4	1733021407		AP 103 BR4	1733022407		102,5	84	7	
AP 121 BA4	1733021408		AP 121 BR4	1733022408		121	102,5	8	
AP 140 BA4	1733021409		AP 140 BR4	1733022409		139,5	121	9	
AP 180 BA4	1733021410		AP 180 BR4	1733022410		180	157	12	
AP 39 BA5	1733021503	Ø 5 mm	AP 39 BR5	1733022503	Ø 5 mm	38,5	19,5	3	
AP 60 BA5	1733021504		AP 60 BR5	1733022504		59,5	43,5	4	
AP 70 BA5	1733021505		AP 70 BR5	1733022505		69,1	43,5	5	
AP 87 BA5	1733021506		AP 87 BR5	1733022506		86,5	68	6	
AP 103 BA5	1733021507		AP 103 BR5	1733022507		102,5	84	7	
AP 121 BA5	1733021508		AP 121 BR5	1733022508		121	102,5	8	
AP 140 BA5	1733021509		AP 140 BR5	1733022509		139,5	121	9	
AP 180 BA5	1733021510		AP 180 BR5	1733022510		180	157	12	
AP 39 BA6	1733021603	Ø 6 mm	AP 39 BR6	1733022603	Ø 6 mm	38,5	19,5	3	
AP 60 BA6	1733021604		AP 60 BR6	1733022604		59,5	43,5	4	
AP 70 BA6	1733021605		AP 70 BR6	1733022605		69,1	43,5	5	
AP 87 BA6	1733021606		AP 87 BR6	1733022606		86,5	68	6	
AP 103 BA6	1733021607		AP 103 BR6	1733022607		102,5	84	7	
AP 121 BA6	1733021608		AP 121 BR6	1733022608		121	102,5	8	
AP 140 BA6	1733021609		AP 140 BR6	1733022609		139,5	121	9	
AP 180 BA6	1733021610		AP 180 BR6	1733022610		180	157	12	

3





Strain relief modules for DIN and Omega rails

FEATURES

- Strain relief according to EN 62444
- Easy to install
- Cost efficient solution
- UL94-V0

The APD modules are used in electrical cabinets to organise the cables whilst providing strain relief according to EN 62444.

The cables can be fixed with standard plastic ties or reusable velcro ties.

Material: TPE

Flammability: self-extinguishing acc. to UL94-V0

Temperature: -40°C... +140°C (static)

Features: halogens and silicones free

RELATED PRODUCTS

- FV cable ties (page 103)



Model	Code	Dimensions (mm)		Teeth	Pcs (/pack)
		L1	L2		
APD 39	1733000003	38,5	28,3	3	10
APD 80	1733000006	79,5	68	4	
APD 140	1733000009	139,5	128,1	9	
APD 180	1733000012	180	157	12	

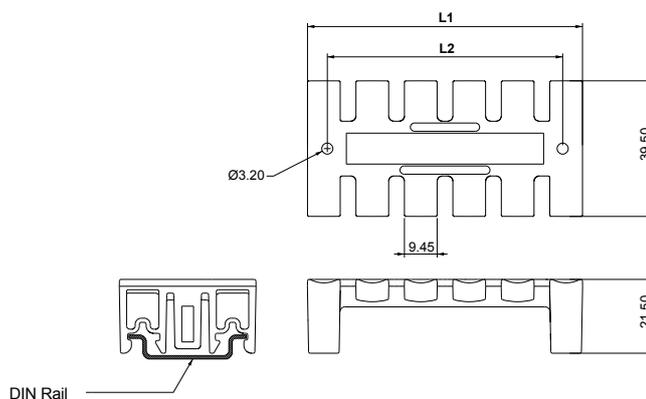


APD 39-80-140



APD 180

Dimensions (mm)





AP-DP

Strain relief modules - double comb for screw fixing

FEATURES

- Strain relief acc. to EN 62444
- Easy to install
- Cost efficient solution
- UL94-V0

The AP-DP modules are used in electrical switchboards and equipment keeping cables of various sizes tidy whilst providing strain relief according to EN 62444. The cables can be fixed with standard plastic ties or reusable Velcro ties. Spacers are available for multi-tier applications.

Material: PA66

Flammability: self-extinguishing acc. to UL94-V0

Temperature: -40°C... +140°C (static)

Features: halogens and silicones free

RELATED PRODUCTS

- DZ spacers (page 99)
- FV cable ties (page 103)



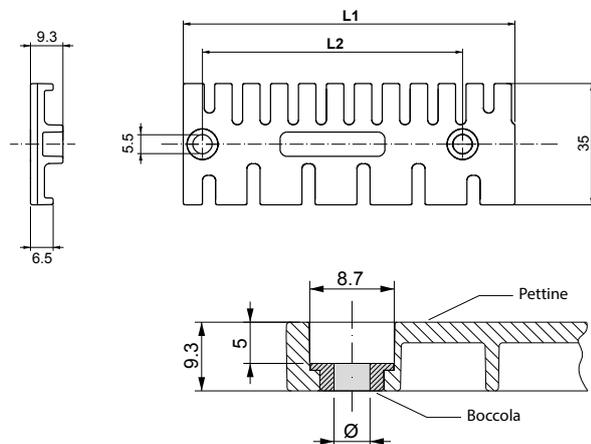
Aluminum bushing



Brass bushing

Model	Code	Bushing	Dimensions (mm)		Teeth	Pcs (/pack)
			L1	L2		
AP-DP 63	1733010047	-	63,4	42	4 - 7	10
AP-DP 95	1733010611	-	95	74,5	6 - 11	
AP-DP 119	1733010713	-	119	108	7 - 13	
AP-DP 63-BA	1733011447	Ø 4 mm	63,4	42	4 - 7	
AP-DP 95-BA4	1733011411		95	74,5	6 - 11	
AP-DP 119-BA4	1733011413		119	108	7 - 13	
AP-DP 63-BR4	1733012447	Ø 4 mm	63,4	42	4 - 7	
AP-DP 95-BR4	1733012411		95	74,5	6 - 11	
AP-DP 119-BR4	1733012413		119	108	7 - 13	

Dimensions (mm)



FEATURES

- Increase in cable bundle density

The spacers are used to build a multi-tier system in the case of a large number of cables.

Material: Aluminium

RELATED PRODUCTS

- AP strain relief modules
- AP-DP double-comb strain relief modules



Model	Code	Suitable for	Dimensions (mm)			Pcs (/pack)
			H	D1	D2	
DZ 30	1733020011	AP-DP	30	7	5,2	10
DZ 32	1733020012	AP	32	12	6,2	



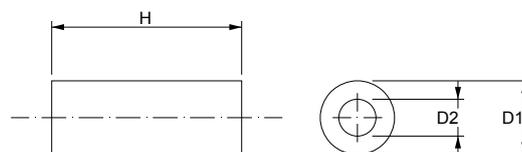
DZ 32



DZ 30



Dimensions (mm)





MFK - MFY

Cable fixing clamps

FEATURES

- For cable diameter from 13 to 95 mm
- Strain relief acc. to EN 61914
- Fixing screws not included

The MFK/MFY cable clamps are used to secure cables with diameters up to 95 mm diameter in safe and strain relief position. The MFK is used for single cable and the MFY is used up to three cables.

They are normally used in electrical installation to keep the cables in the right position according to EN 61914 strain relief standard.

Material: PA, halogens and silicones free

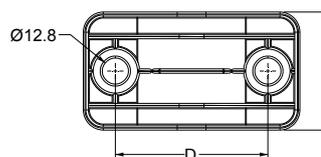
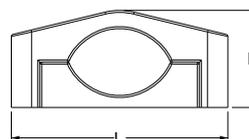
Flammability: self-extinguishing acc. to UL94-V0

Temperature: -40°C... +140°C (static)



Model	Code	Nr. Cables	Ø Cable min/max (mm)	Dimensions (mm)				Pcs (/pack)
				L	B	H	D	
MFK 13-25	1733030010	1	13/25	87,5	47	35	60	1
MFK 20-36	1733030015	1	20/36	88	58	42	60	
MFKD 36-52	1733030021	1	36/52	106,5	59	49,5	75	
MFK 55-75	1733030025	1	55/75	113,5	59	52	83	
MFK 75-95	1733030030	1	75/95	128	59	64,5	95	
MFY 27-38	1733030040	3	27/38	175	70	73,5	125	
MFY 38-51	1733030050	3	38/51	189	76	94	144	
MFY 51-69	1733030060	3	51/69	214	80,5	121	168	

Dimensions (mm)





Reusable cable ties for single or multiple wiring

FEATURES

- For cables with diameter from 7 to 32 mm
- Strain relief according to EN 62444
- Fastening with adhesive and/or with screw (not included)
- Reusable
- Cost effective and practical solution

The CFP series cable clamps are used for single or multiple cables offering an available space ranging from 7 to 32mm. They are reusable and lock the cable or cables with excellent anti-snap traction and are installed in a very short time. Fixing is done with an adhesive base and/or with a central screw.

Material: PA66, halogens and silicones free

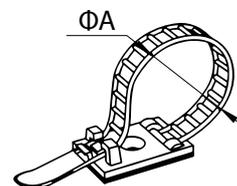
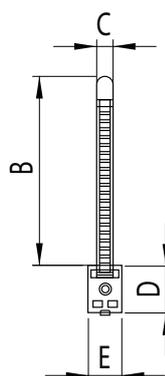
Flammability: self-extinguishing acc. to UL94-V2

Temperature: -20°C... +100°C (static)



Model	Code	Ø A min/max (mm)	Dimensions (mm)				Pcs (/pack)
			B	C	D	E	
CFP 1	1733030110	7 - 24	91	8	25	18	100
CFP 2	1733030120	10 - 24	90	12	30	21	
CFP 3	1733030130	10 - 32	110	12	30	21	

Dimensions (mm)





FV OW

Velcro® ONE-WRAP® ties

FEATURES

- The Velcro® ties can be reusable many times
- Adaptable to the cable shape
- Suitable for high vibration scenarios
- Packed pre-cutted in reels
- Without glue, no chemical traces
- Standard color black, other colors on demand

The Velcro® cable ties allow a large number of cables to be bundled together. They prevent damage during vibration events and can be reused several times. The OW series includes already pre-cutted ties conveniently packed in 100 pcs reel.

Material: PP + Nylon

Flammability: self-extinguishing acc. UL94-V2

Temperature: 0°C... +104°C (static)

RELATED PRODUCTS

- AP strain relief modules
- AP-DP double-comb strain relief modules
- APD strain relief modules for DIN rails



Model	Code	Dimensions (mm)			Pcs (/pack)
		A	B	C	
OW13	1733021012	13	200	7	100
OW20	1733021013	20	230	13	



Dimensions (mm)





Hook and loop cable ties

FEATURES

- The hook and loop cable ties can be reused
- Adaptable to the shape of the cable bundles
- Particularly effective in the event of vibration
- Also available in reels



Hook and loop cable ties allow a large number of cables to be bundled together. They prevent damage in the event of vibration and can be reused many times. They are available in 3 different types or in 25 m reels.

Material: PE + Nylon

Flammability: self-extinguishing acc. UL94-V2

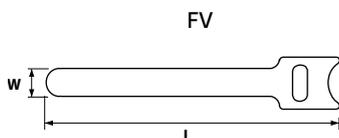
Temperature: 0°C... +104°C (static)

RELATED PRODUCTS

- AP strain relief modules
- AP-DP double-comb strain relief modules
- APD strain relief modules for DIN rails

Model	Code	Dimensions		Pcs (/pack)
		L	W	
FV1	1733020020	200 mm	10	100
FV2	1733020025	200 mm	13	
FV3	1733020030	300 mm	17	
BOB 10X25	1733021010	25 m	10	1
BOB 20X25	1733021020	25 m	20	
BOB 15X10	1733021006	10 m	15	
BOB 19X10	1733021008	10 m	19	
BOB 38X10	1733021009	10 m	38	

Dimensions (mm)





FEATURES

- Especially designed for food and pharma industries
- Self-extinguishing UL94-V2
- 4 measures standard, others on request
- Useable in the HACCP process

The metal detectable cable ties are FDA compliant for Food & Pharma industries application. A particular production process add a metallic pigment which makes the cable ties detectable by x-rays and metal detectors.

They can be used in the HACCP process reducing the risk of food contamination. The blue color help the visual recognition.

Material: PA66

Flammability: self-extinguishing acc. UL94-V2

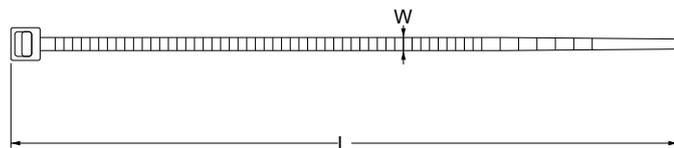
Temperature: -40°C... +85°C (static)

RELATED PRODUCTS

- DES PDM 24 CLEAN
- FVM cable ties

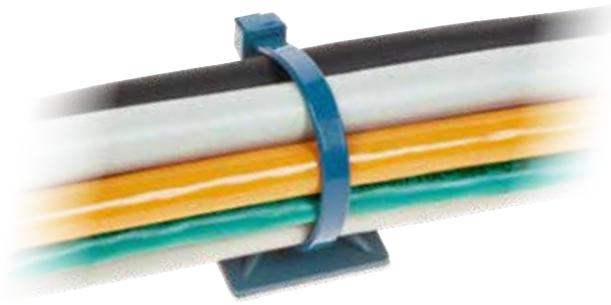
Model	Code	Dimensions (mm)		Pcs (/pack)
		L	W	
FVM101	1733021101	100	2,5	100
FVM150	1733021150	150	3,6	
FVM200	1733021200	200	4,8	
FVM300	1733021300	300	4,8	

Dimensions (mm)





Fixing clips for metal detectable cable ties



FEATURES

- Specific for the food and pharmaceutical industry
- UL94-HB
- Double fixing system: adhesive or screws
- Fixing on four sides
- Can be used in the HACCP process

The fixing clips for FVM cable ties are specially designed for the food and pharmaceutical industry. An exclusive manufacturing process includes a metallic pigment that makes them detectable by metal detectors or X-ray devices. The mounting supports allow the fixing of the clamps even in areas with high vibrations, thanks to the 4 direction fixing. Can be used in the HACCP process reducing the risk of food contamination. The blue colour facilitates visual recognition.

Material: PA66

Flammability: UL94-HB

Temperature: -40°C... +85°C (static)

RELATED PRODUCTS

- DES PDM 24 clean
- FVM cable ties

Model	Code	Dimensions (mm)				Cable tie width min/max (mm)	Pcs (/pack)
		L	W	H	D		
FVS-Q1	1733021305	12,8	12,8	3,4	-	3,2	
FVS-Q2	1733021310	19	19	4,2	3,5	4	100
FVS-Q3	1733021315	28,1	28,1	5,2	5,7	5,3	
FVS-R8	1733021325	14,8	9,5	7,2	4,5	4,8	100
FVS-T10	1733021335	21,7	15,9	9,7	4,5	9	100



FVS-T10



FVS-R8



FVS-Q

Dimensions (mm)

