

Cable protection conduit Murrflex



Advantages



Protecting and bundling cables

Cable protection conduits can be used to protect cables against dirt and moisture. They also offer mechanical protection and are suitable for bundling cables.

A large range of cable protection conduits, from those laid statically to those subject to extreme dynamic stresses, covers almost all requirements.

A large number of our conduits are certified and approved, e.g. to DIN5510, UL, CSA, NF F 16-101...



- ✓ Wide range of possible uses
- ✓ Many approvals/certificates
- ✓ Variety of profiles
- ✓ High quality

Murrflex product range



Standard cable protection conduits Murrflex

Round cable protection conduits for plant construction, mechanical engineering, control cabinet construction, vehicle construction and railway engineering.

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Special cable protection conduits Murrflex

Specially shaped cable protection conduits with particular properties, suited for special areas of application.

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One-piece cable protection conduits Murrflex

Slitted cable protection conduits in a range of versions and materials. Lines can be protected or bundled later.

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Multi-piece cable protection conduit Murrflex Split-Flex

Two-piece cable protection conduits in a range of versions and materials. Ideal for repairing existing systems.

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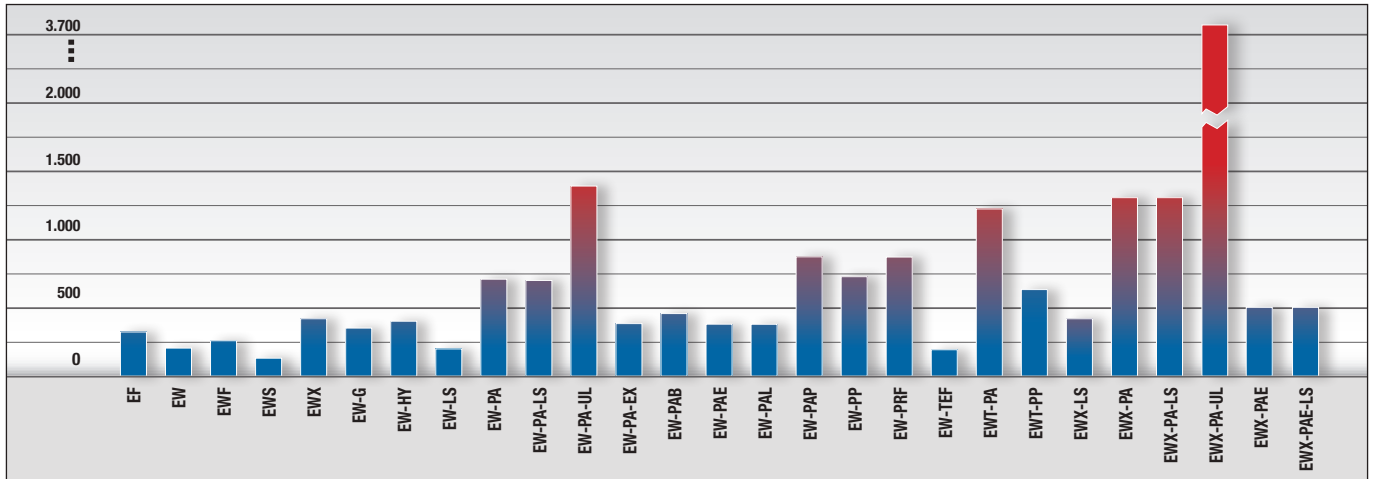
Recommendations for use

	EF	EW	EW-F	EWS	EWX	EW-G	EW-HY	EW-LS	EW-PA	EW-PA-LS	EW-PA-UL	EW-PA-EX	EW-PAB	EW-PAE	EW-PAL	EW-PAP	EW-PP	EW-PRF	EW-TEF	EW-T-PA	EW-T-PP	EWX-LS	EWX-PA	EWX-PA-LS	EWX-PA-UL	EWX-PAE	EWX-PAE-LS	GF
Bundling cables		✓	✓	✓	✓			✓														✓						✓
Light mechanical protection	✓	✓	✓	✓		✓		✓											✓									
Medium mechanical protection					✓		✓					✓	✓	✓	✓							✓				✓	✓	
High mechanical protection									✓	✓						✓	✓	✓		✓	✓							
Very high mechanical protection											✓												✓	✓				
Extremely high mechanical protection																									✓			
Persistent movements / dynamic applications (robotically controlled axes)	✓						✓						✓				✓	✓								✓	✓	
Protection against hot solids (e.g. chippings)																✓												
ATEX Guideline 94/9/EG												✓																
UL-listed conduits File No.: E148958									✓		✓		✓					✓								✓		
CSA-listed conduits File No.: 217843									✓		✓		✓															
Approved by German railways DIN 5510-2											✓		✓						✓									
Approved by French railways NF F 16-101											✓		✓						✓									
Airways approval ABD 0031																			✓									
Airways approval FAR 25853																			✓									
Very good chemical resistance	✓					✓	✓										✓		✓		✓							
Hygiene applications						✓																						
For pre-assembled cables and retrofitting of cables								✓		✓										✓	✓	✓		✓			✓	
Extreme temperature range																			✓									

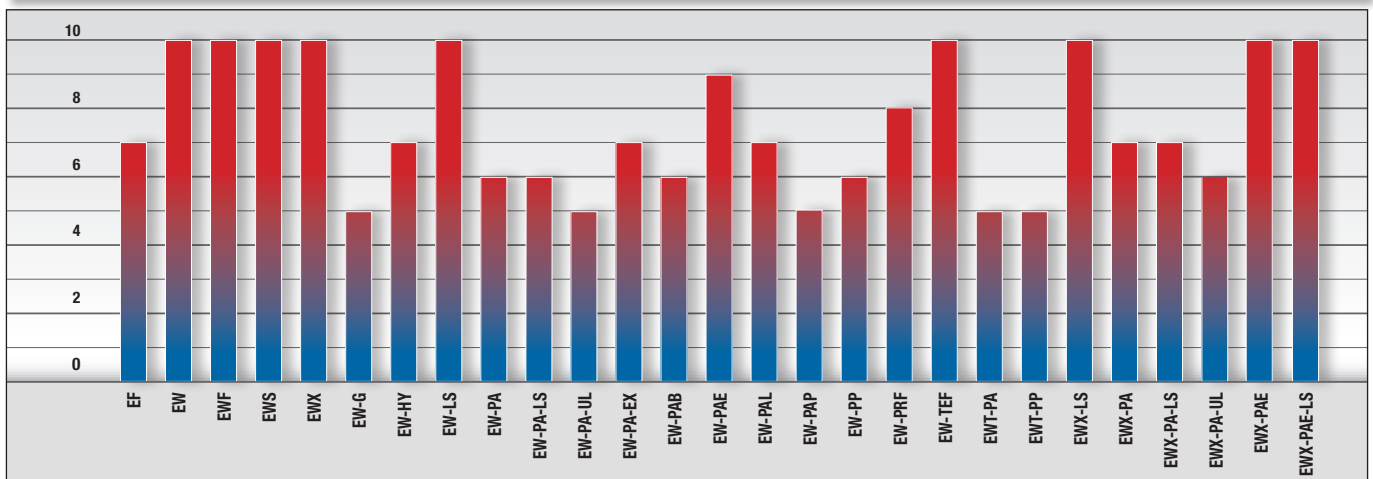
Material data

	Material	Temperature area [°C]			Fire specifications UL94	UL 224, type B	Self-extinguishing	UL File number E148958	Fire classification DIN 5510 S4	FMVSS Type A [<75 mm/min] type B [<100 mm/min]	CSA 217843	Crush resistance / N/100 mm EW-M25/P21 / EWX-M25/P21	Halogen-free	Phosphorous-free	Cadmium-free	Asbestos-free	Lead-free	Silicone-free	PWS-free	RoHS Compliant
		Min.	Max.	Short periods																
EF	Thermoplastic elastomer	-50	160	180	HB							>300	✓	✓	✓	✓	✓	✓	✓	✓
EW	Polyethylene	-40	90	120	HB					B		>200	✓	✓	✓	✓	✓	✓	✓	✓
EWf	Polyethylene	-40	90	120	V2		✓					>250	✓	✓	✓	✓	✓	✓	✓	✓
EWS	Polyethylene	-40	90	120	HB							>100	✓	✓	✓	✓	✓	✓	✓	✓
EWX	Polyethylene	-40	90	120	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-G	Polypropylene, EPDM	-40	120	150	HB					A		>350		✓	✓	✓	✓	✓	✓	✓
EW-HY	Thermoplastic elastomer	-50	160	180	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-LS	Polyethylene	-40	90	120	HB					B		>200	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA	Polyamide PA6	-40	140	160	HB			✓		B	✓	>700	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-LS	Polyamide PA6	-40	140	160	HB					B		>700	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-UL	Polyamide PA6	-40	140	160	V0		✓	✓	✓	A	✓	>1300	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-EX	polyamide PA12	-40	110	150	HB					B		>350	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAB	Polyamide PA6	-40	140	160	V0		✓	✓	✓	B	✓	>450	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAE	polyamide PA12	-40	120	150	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAL	Polyamide PA6	-40	140	160	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAP	Polyamide PA6	-40	140	160	HB					B		>800	✓	✓	✓	✓	✓	✓	✓	
EW-PP	Polypropylene	-40	130	150	V2		✓			A		>700	✓	✓	✓	✓	✓	✓	✓	✓
EW-PRF	polyamide PA12	-50	105	150	V0		✓	✓	✓	B		>800		✓	✓	✓	✓	✓	✓	✓
EW-TEF	Fluoroplastic	-200	260		V0		✓			A		>200	✓	✓	✓	✓	✓	✓	✓	✓
EWt-PA	Polyamide PA6	-40	140	160	HB							>1200	✓	✓	✓	✓	✓	✓	✓	✓
EWt-PP	Polypropylene	-40	130	150	V2		✓					>600		✓	✓	✓	✓	✓	✓	✓
EWX-LS	Polyethylene	-40	90	120	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA	Polyamide PA6	-40	140	160	HB					B		>1300	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA-LS	Polyamide PA6	-40	140	160	HB					B		>1300	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA-UL	Polyamide PA6	-40	140	160	V0		✓	✓				>3800	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PAE	polyamide PA12	-40	120	150	HB					B		>500	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PAE-LS	polyamide PA12	-40	120	150	HB					B		>500	✓	✓	✓	✓	✓	✓	✓	✓
GF	Polyamide PA6	-40	150	175		✓	✓			B			✓	✓	✓	✓	✓	✓	✓	

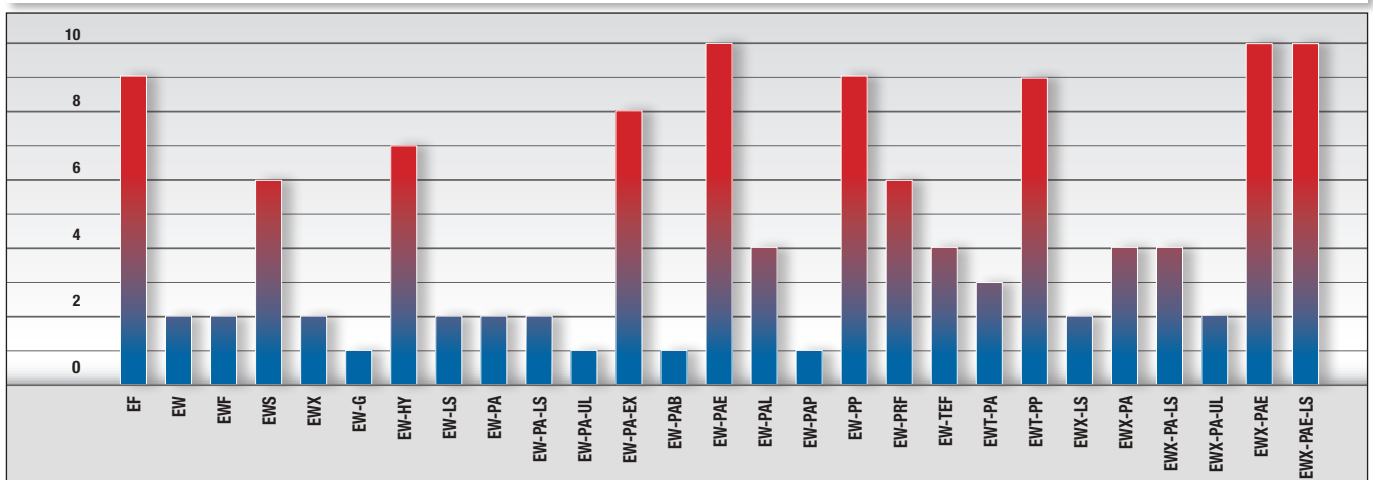
Selection diagrams



Crush resistance [N/100 mm]

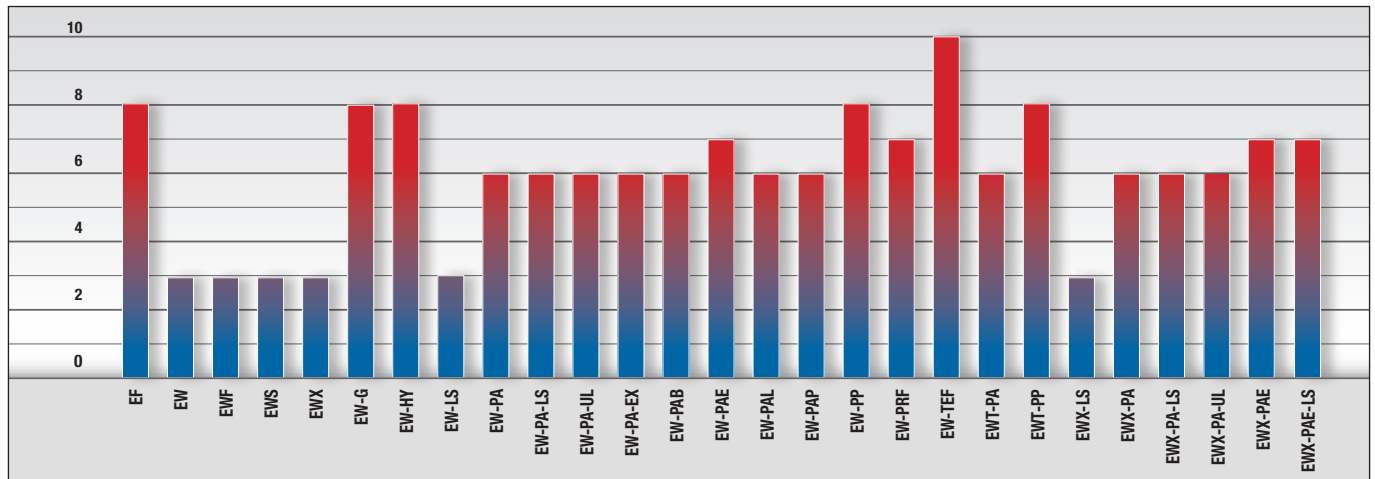


Flexibility

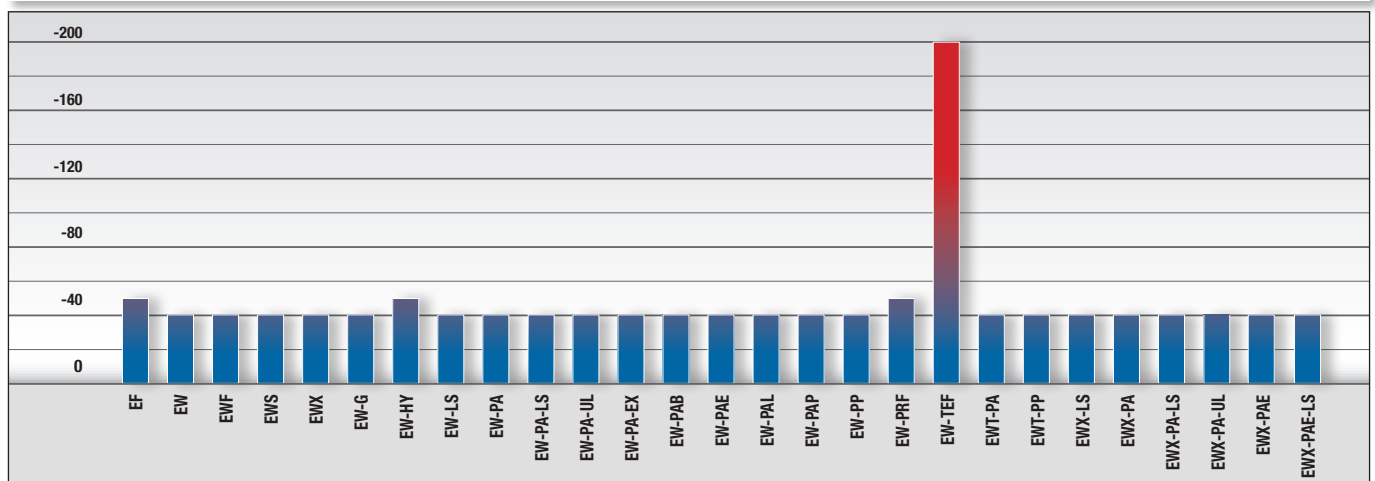


Flexural fatigue strength

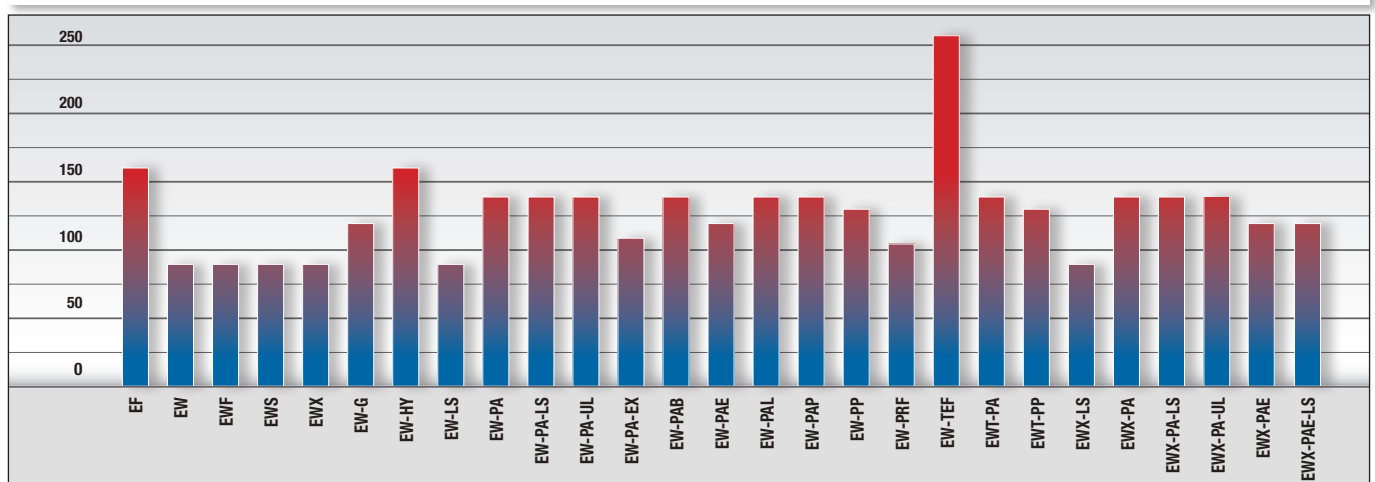
Selection diagrams



Chemical resistance



Lower temperature range [°C]



Higher temperature range [°C]

Combination options

Conduit fittings up to conduit size M50 / Pg48														
	m-top									m-tec				
	CVG	CVW 45°	CVW 90°	DWV 45°	DWV 90°	IVG	VG	VW 45°	VW 90°	EH	KW	CSKV	ECSKV	MECSKV
EF	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWf	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-G	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿
EW-HY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-LS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-LS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-UL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-EX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAP	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EW-PP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PRF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-TEF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWT-PA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWT-PP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-LS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA-LS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA-UL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PAE-LS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GF	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

✓ combinable

✗ not combinable

⦿ combinable to an extent (remove sheathing)

Combination options

Conduit fittings up to conduit size M50 / Pg48									From NW 70		Special		
m-tec			m-fix			Bulkhead fitting			m-Jumbo		EH-EMV	AT	
CKW	MCSKV	MCKW	MSV	WSV	KSV	KFW *	KFW/D	KFW/X	SA-Jumbo	KFW-Jumbo			
×	×	×	×	×	×	×	×	×	×	×	×	×	EF
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EWf
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EWS
✓	✓	✓	*	*	*	✓	×	✓	✓	✓	×	✓	EWX
⋮	⋮	⋮	⋮	⋮	⋮	✓	⋮	×	⋮	⋮	×	⋮	EW-G
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-HY
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-LS
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PA
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PA-LS
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PA-UL
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PA-EX
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PAB
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PAE
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PAL
×	×	×	×	×	×	×	×	×	×	×	✓	×	EW-PAP
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PP
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-PRF
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EW-TEF
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EWT-PA
✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	✓	EWT-PP
✓	✓	✓	*	*	*	✓	×	✓	✓	✓	×	✓	EWX-LS
✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	×	✓	EWX-PA
✓	✓	✓	*	*	*	✓	×	✓	✓	✓	×	✓	EWX-PA-LS
✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	×	✓	EWX-PA-UL
✓	✓	✓	*	*	*	✓	×	✓	✓	✓	×	✓	EWX-PAE
✓	✓	✓	*	*	*	✓	×	✓	✓	✓	×	✓	EWX-PAE-LS
×	×	×	×	×	×	×	×	×	×	×	×	×	GF

✓ combinable

× not combinable

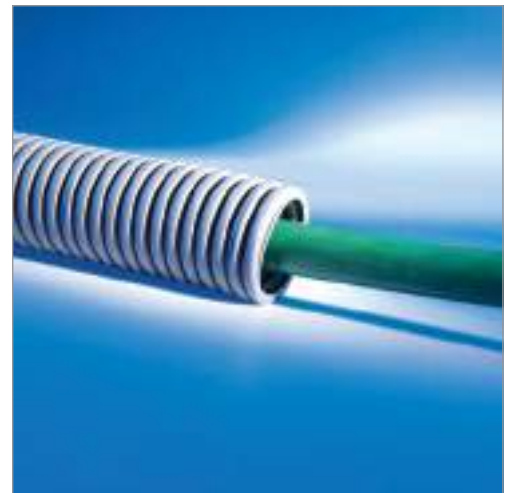
* combinable where extraction forces are low

⋮ combinable to an extent (remove sheathing)

* in connection with an additional conduit or cable fitting



Cable protection conduit Murrflex closed



System overview, standard cable protection conduit Murrflex

	Type EW EWX (high corrugation) Universal cable protection conduit for light mechanical stresses or for bundling cables. Page 36		 -40–90 °C short periods 120 °C  Polyethylene  Fire classification HB  EW: > 200 N/100 mm EWX: > 400 N/100 mm
	Type EWS Cable protection conduit for light mechanical stresses. Ideal for bundling cables at control cabinet doors. Page 38		 -40–90 °C short periods 120 °C  Polyethylene  Fire classification HB  > 100 N/100 mm
	Type EWF Universal self-extinguishing cable protection conduit for light mechanical stresses or bundling cables. Page 39		 -40–90 °C short periods 120 °C  Polyethylene  Fire classification V2  Self-extinguishing  > 250 N/100 mm
	Type EW-PP Self-extinguishing cable protection conduit for medium mechanical stresses with good chemical resistance. Page 40		 -40–130 °C short periods 150 °C  Polypropylene  Fire classification V2  Self-extinguishing  > 700 N/100 mm
	Type EW-PA EWX-PA (high corrugation) Most universal UR and CSA-listed cable protection conduit for medium to high mechanical stresses. Page 41	  	 -40–140 °C short periods 160 °C  Polyamide PA6  Fire classification HB  EW-PA: > 700 N/100 mm EWX-PA: > 1,300 N/100 mm
	Type EW-PAL Universal cable protection conduit for light to medium mechanical stresses. Page 43		 -40–140 °C short periods 160 °C  Polyamide PA6  Fire classification HB  > 400 N/100 mm

Cable protection conduit

Murrflex closed

	Type EW-PAB Cable protection conduit for medium to high mechanical stresses. UR and CSA-listed self-extinguishing conduit approved for use in railway engineering. Page 44	    	 -40 – 140 °C short period 160 °C  Polyamide PA6  Fire classification V0  Self-extinguishing  > 450 N/100 mm
	Type EW-PA-UL EWX-PA-UL (high corrugation) Self-extinguishing UR-listed cable protection conduit with eXremely high mechanical strength yet excellent flexibility. Page 45	    	 -40 – 140 °C short period 160 °C  Polyamide PA6  Fire classification V0  Self-extinguishing  EW-PA-UL: > 1300 N/100 mm  EWX-PA-UL: > 3,800 N/100 mm
	Type EW-PRF Self-extinguishing cable protection conduit for high mechanical and dynamic stresses with a high level of flexibility. UR-listed and self-extinguishing. Page 47	      	 -50 – 105 °C short period 150 °C  Polyamide PA12  Fire classification V0  Self-extinguishing  > 800 N/100 mm
	Type EW-HY Cable protection conduit for medium to high mechanical stresses and maximum flexibility. Ideal for robot applications at higher ambient temperatures. Page 48	 	 -50 – 160 °C short periods 180 °C  Thermo-plastic elastomer  Fire classification HB  > 400 N/100 mm
	Type EW-PAE EWX-PAE (high corrugation) Specially developed cable protection conduit for robot applications. For eXremely small bending radii with eX-tremely high flexibility and eXtrême flexural fatigue strength. Page 49	 	 -40 – 120 °C short periods 150 °C  Polyamide PA12  Fire classification HB  EW-PAE: > 400 N/100 mm  EWX-PAE: > 500 N/100 mm

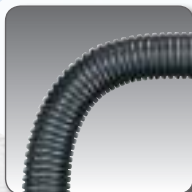


System overview, special cable protection conduit Murrflex



Cable protection conduit

Murrflex closed

	Type EW-PA-EX Conductive plastic conduit made from polyamide 12 for applications in areas at risk of explosion. Complies with the ATEX guideline 94/9/EG. Page 51	CE Ex 	 -40 – 110 °C short periods 150 °C  Polyamide PA12  Fire classification HB  > 350 N/100 mm
	Type EW-TEF Self-extinguishing cable protection conduit for extreme temperatures and light mechanical stresses. Page 52	CE	 -200 – 260 °C  Fluoroplastic  Fire classification V0  Self-extinguishing > 200 N/100 mm
	Type EW-PAP (with metal braiding) Cable protection conduit sheathed in metal braiding. For use in EMV applications and as protection for cables against flying sparks. Page 53	CE	 -40 – 140 °C short periods 160 °C  Polyamide PA6  Galvanised steel wire  Fire classification HB  > 800 N/100 mm
	Type EW-G (with EPDM sheathing) Cable protection conduit with smooth sheathing ensures easy cleaning and good chemical resistance. Standard connections can be used. Page 54	CE	 -40 – 120 °C short periods 150 °C  Polypropylene  EPDM  Fire classification HB  > 350 N/100 mm
	Type EF (rectangular conduit) Rectangular cable protection conduit for medium mechanical stresses and maximum flexibility. Ideal as an affordable alternative to cable drag chains. Page 55	CE 	 -50 – 160 °C short periods 180 °C  Thermoplastic elastomer  Fire classification HB  > 300 N/100 mm
	Type GF (braided conduit) Single wires and cables can be bundled together easily during assembly by pressing together the braided conduit. Page 56		 -50 – 150 °C short periods 175 °C  Polyamide PA6  Self-extinguishing

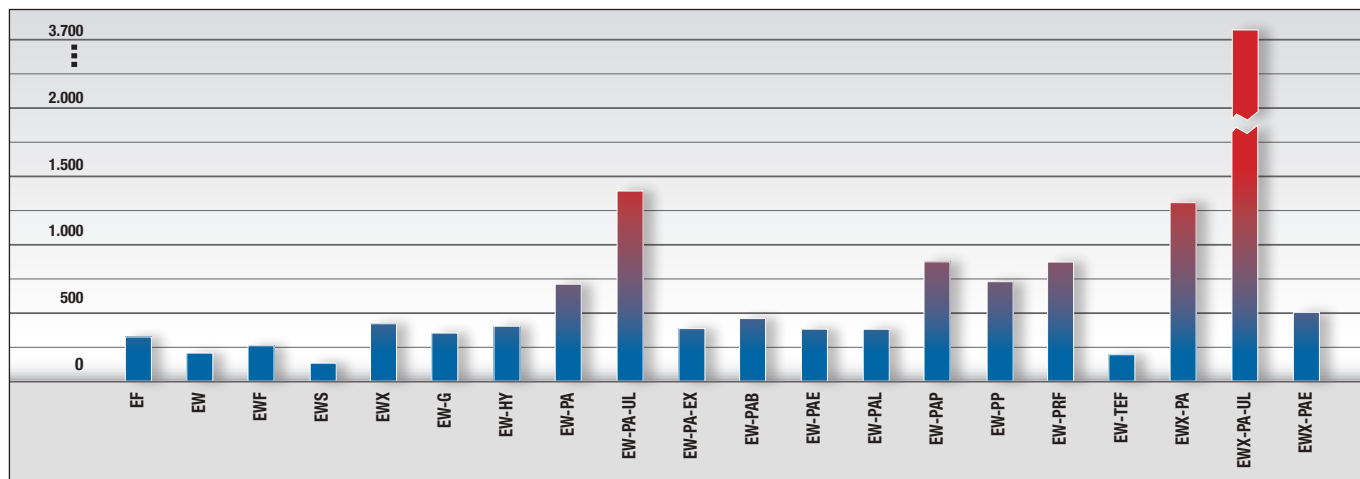
Recommendations for use

	EF	EW	EW-F	EWS	EWX	EW-G	EW-HY	EW-PA	EW-PA-UL	EW-PA-EX	EW-PAB	EW-PAE	EW-PAL	EW-PAP	EW-PP	EW-PRF	EW-TEF	EWX-PA	EWX-PA-UL	EWX-PAE	GF
Bundling cables		✓	✓	✓	✓																✓
Light mechanical protection	✓	✓	✓	✓		✓											✓				
Medium mechanical protection					✓		✓			✓	✓	✓	✓							✓	
High mechanical protection								✓						✓	✓	✓					
Very high mechanical protection									✓									✓			
Extremely high mechanical protection																			✓		
Persistent movements / dynamic applications (robotically controlled axes)	✓						✓				✓				✓	✓				✓	
Protection against hot solids (e.g. chippings)														✓							
ATEX Guideline 94/9/EG										✓											
UL-listed conduits File No.: E148958								✓	✓		✓					✓			✓		
CSA-listed conduits File No.: 217843								✓	✓		✓										
German railways approval DIN 5510-2									✓		✓					✓					
Approved by French railways NF F 16-101									✓		✓					✓					
Airways approval ABD 0031																✓					
Airways approval FAR 25853																✓					
Very good chemical resistance	✓					✓	✓								✓		✓				
Hygiene applications						✓															
For pre-assembled cables and retrofitting of cables																					
Extreme temperature range																	✓				

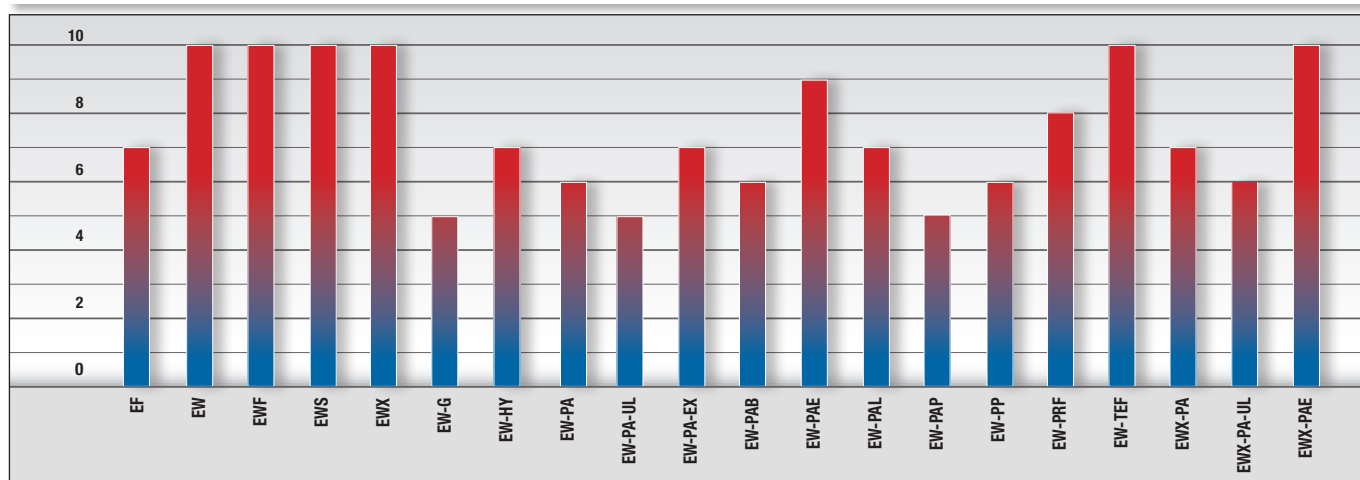
Material data

	Material	Temperature area [°C]			Fire specifications UL94	UL 224, type B	Self-extinguishing	UL File number E148958	Fire classification DIN 5510 S4	FMVSS Type A [<75 mm/min] type B [<100 mm/min]	CSA 217843	Crush resistance / N/100 mm EW-M25/P21 / EWX-M25/P21	Halogen-free	Phosphorous-free	Cadmium-free	Asbestos-free	Lead-free	Silicone-free	PWS-free	RoHS Compliant
		Min.	Max.	Short periods																
EF	Thermoplastic elastomer	-50	160	180	HB							>300	✓	✓	✓	✓	✓	✓	✓	✓
EW	Polyethylene	-40	90	120	HB					B		>200	✓	✓	✓	✓	✓	✓	✓	✓
EWF	Polyethylene	-40	90	120	V2		✓					>250	✓	✓	✓	✓	✓	✓	✓	✓
EWS	Polyethylene	-40	90	120	HB							>100	✓	✓	✓	✓	✓	✓	✓	✓
EWX	Polyethylene	-40	90	120	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-G	Polypropylene, EPDM	-40	120	150	HB					A		>350		✓	✓	✓	✓	✓	✓	✓
EW-HY	Thermoplastic elastomer	-50	160	180	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA	Polyamide PA6	-40	140	160	HB			✓		B	✓	>700	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-UL	Polyamide PA6	-40	140	160	V0		✓	✓	✓	A	✓	>1300	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-EX	Polyamide PA12	-40	110	150	HB					B		>350	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAB	Polyamide PA6	-40	140	160	V0		✓	✓	✓	B	✓	>450	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAE	Polyamide PA12	-40	120	150	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAL	Polyamide PA6	-40	140	160	HB					B		>400	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAP	Polyamide PA6	-40	140	160	HB					B		>800	✓	✓	✓	✓	✓	✓	✓	
EW-PP	Polypropylene	-40	130	150	V2		✓			A		>700		✓	✓	✓	✓	✓	✓	✓
EW-PRF	Polyamide PA12	-50	105	150	V0		✓	✓	✓	B		>800	✓	✓	✓	✓	✓	✓	✓	✓
EW-TEF	Fluoroplastic	-200	260		V0		✓			A		>200	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA	Polyamide PA6	-40	140	160	HB					B		>1300	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA-UL	Polyamide PA6	-40	140	160	V0		✓	✓				>3800	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PAE	Polyamide PA12	-40	120	150	HB					B		>500	✓	✓	✓	✓	✓	✓	✓	✓
GF	Polyamide PA6	-40	150	175		✓	✓			B			✓	✓	✓	✓	✓	✓	✓	

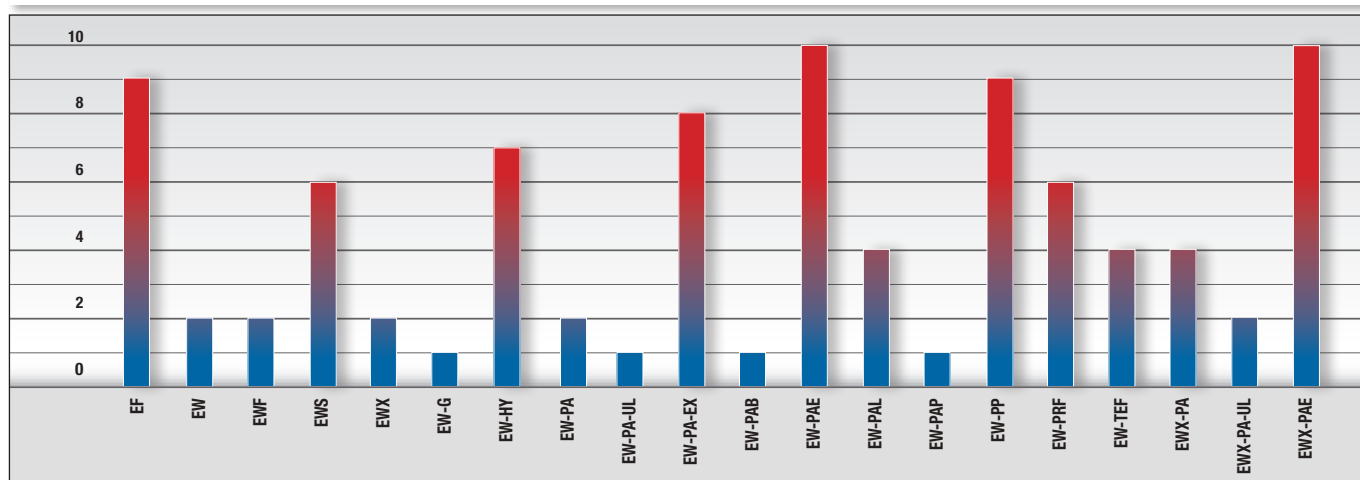
Selection diagrams



Crush resistance [N/100 mm]

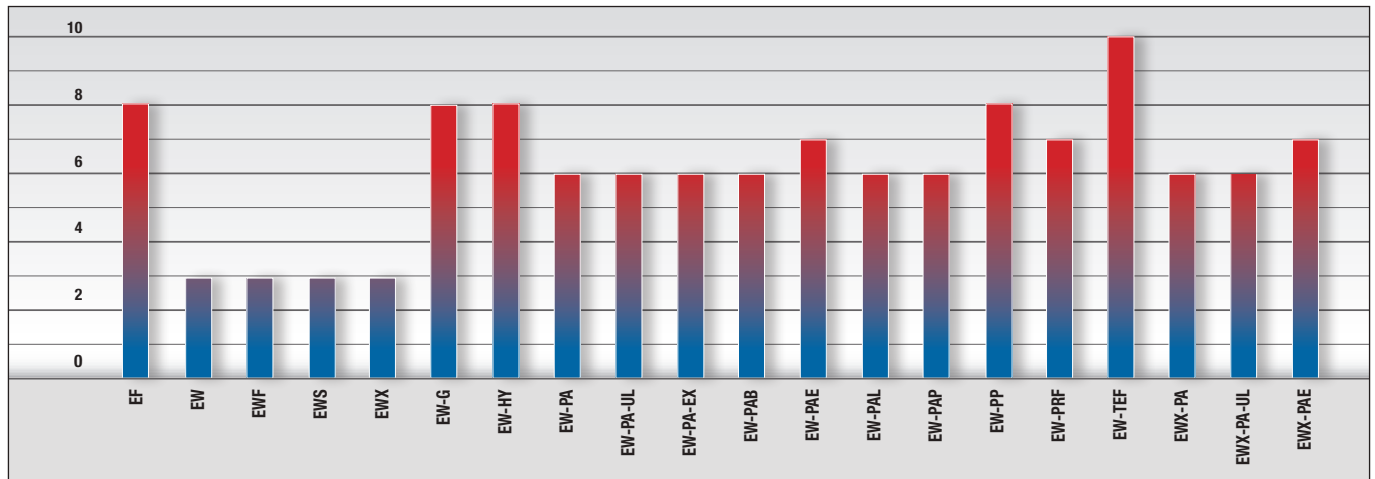


Flexibility

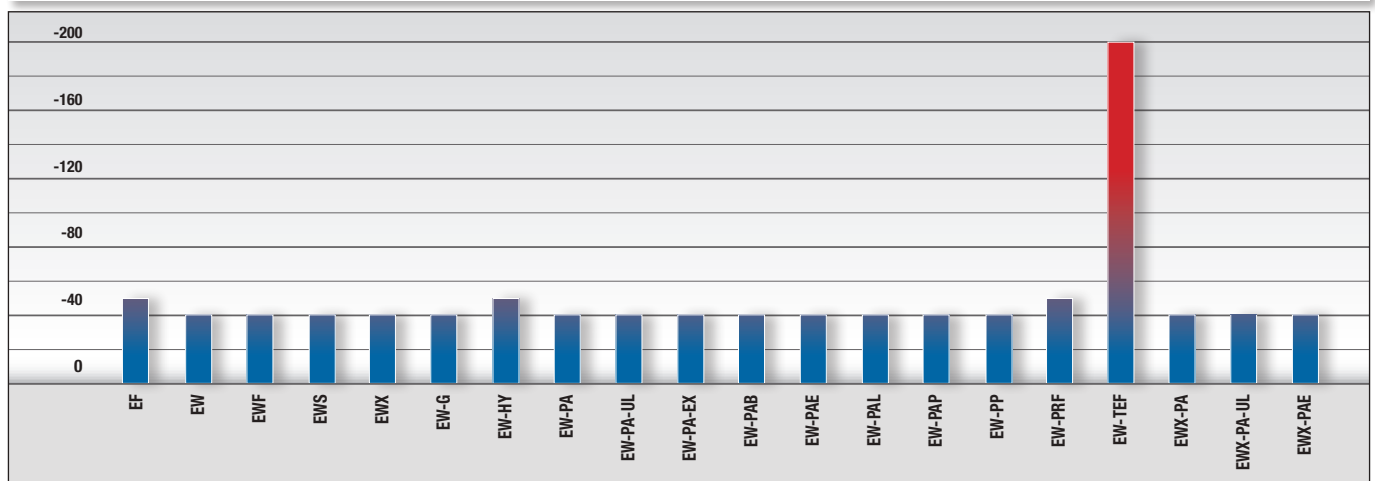


Flexural fatigue strength

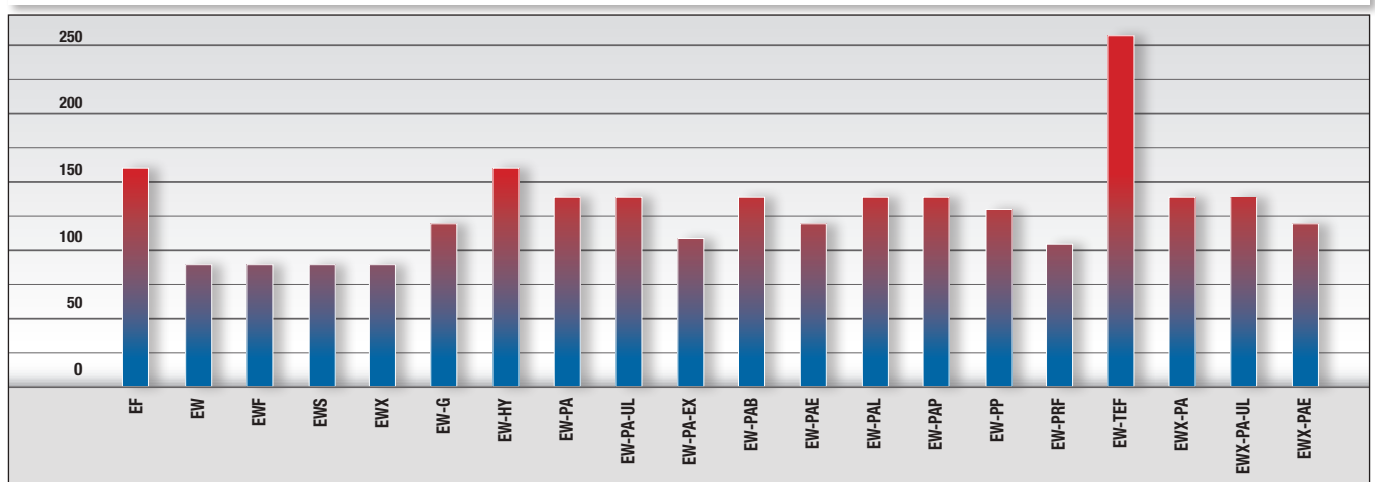
Selection diagrams



Chemical resistance



Lower temperature range [°C]



Higher temperature range [°C]

Combination options

	Conduit fittings up to conduit size M50 / Pg48													
	m-top									m-tec				
	CVG	CVW 45°	CVW 90°	DWV 45°	DWV 90°	IVG	VG	VW 45°	VW 90°	EH	KW	CSKV	ECSKV	MECSKV
EF	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWf	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-G	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿	⦿
EW-HY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-UL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PA-EX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PAP	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EW-PP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-PRF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EW-TEF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PA-UL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EWX-PAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GF	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

✓ combinable

✗ not combinable

⦿ combinable to an extent (remove sheathing)

Combination options

Conduit fittings up to conduit size M50 / Pg48									Ab NW56		Special		
m-tec			m-fix			Bulkhead fitting			m-Jumbo				
CKW	MCSKV	MCKW	MSV	WSV	KSV	KFW ✦	KFW/D	KFW/X	SA-Jumbo	KFW-Jumbo	EH-EMV	AT	
✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	EF
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EWf
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EWS
✓	✓	✓	*	*	*	✓	✕	✓	✓	✓	✕	✓	EWX
⋮	⋮	⋮	⋮	⋮	⋮	✓	⋮	✕	⋮	⋮	✕	⋮	EW-G
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-HY
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PA
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PA-UL
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PA-EX
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PAB
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PAE
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PAL
✕	✕	✕	✕	✕	✕	✕	✕	✕	✓	✓	✓	✕	EW-PAP
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PP
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-PRF
✓	✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✕	✓	EW-TEF
✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✓	✕	✓	EWX-PA
✓	✓	✓	✓	✓	✓	✓	✕	✓	✓	✓	✕	✓	EWX-PA-UL
✓	✓	✓	*	*	*	✓	✕	✓	✓	✓	✕	✓	EWX-PAE
✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	GF

✓ combinable

✗ not combinable

* combinable where extraction forces are low

⋮ combinable to an extent (remove sheathing)

* in connection with an additional conduit or cable fitting



Cable protection conduit

Murrflex closed

Type EW / EWX (high corrugation)



-40 to 90 °C
transient 120 °C



Mod. polyethylene



HB



EW: > 200 N/100 mm
EWX: > 400 N/100 mm



Suitable fittings:
m-top, -tec, -fix, -jumbo, KFW, AT

Universal cable protection conduit for light mechanical stresses or bundling cables with excellent flexibility.

Applications:

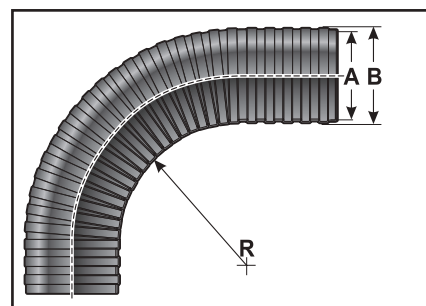
- Plant engineering
- Mechanical engineering
- Control cabinet construction



EW



EWX



Type	Order no.	Colour	A Ø mm	B Ø mm	R mm static	R mm dyn.	Weight kg/100 m	Pack m
EW-M10/P7	83101050	black	8.5	11.5	30.0	-	2.2	50
EW-M12/P9	83101052	black	9.8	13.0	40.0	-	2.4	50
EW-M16/P11	83101054	black	12.0	15.8	45.0	-	3.4	50
EW-M20/P16	83101056	black	15.8	21.0	55.0	-	5.4	50
EW-M20/P16S*	83101058	black	16.8	21.0	60.0	-	6.4	50
EW-M25/P21	83101060	black	22.5	28.5	70.0	-	8.2	50
EW-M32/P29	83101062	black	29.0	34.5	80.0	-	9.6	25
EW-M40/P36	83101064	black	36.0	42.5	100.0	-	12.4	25
EW-M50/P48	83101066	black	47.5	54.5	115.0	-	20.0	25
EW-70 Jumbo	83101070	black	67.5	80.0	180.0	-	46.0	25
EW-95 Jumbo	83101074	black	91.5	106.0	200.0	-	65.0	10
EW-M10/P7	83101010	grey	8.5	11.5	30.0	-	2.2	50
EW-M12/P9	83101012	grey	9.8	13.0	40.0	-	2.4	50
EW-M16/P11	83101014	grey	12.0	15.8	45.0	-	3.4	50
EW-M20/P16	83101016	grey	15.8	21.0	55.0	-	5.4	50
EW-M20/P16S*	83101020	grey	16.8	21.0	60.0	-	6.4	50
EW-M25/P21	83101022	grey	22.5	28.5	70.0	-	8.2	50
EW-M25/P21S*	83103022	grey	23.0	28.5	70.0	-	8.2	50
EW-M32/P29	83101026	grey	29.0	34.5	80.0	-	9.6	25
EW-M40/P36	83101030	grey	36.0	42.5	100.0	-	12.4	25
EW-M50/P48	83101032	grey	47.5	54.5	115.0	-	20.0	25
EW-70 Jumbo	83101036	grey	67.5	80.0	180.0	-	46.0	25
EW-95 Jumbo	83101040	grey	91.5	106.0	200.0	-	65.0	10
* Narrow corrugation								

RoHS
compliant



CE



RoHS
compliant





Cable protection conduit

Murrflex closed

Type EW-PP

RoHS
compliant



-40 to 130 °C
transient 150 °C



Mod. polypropylene



V2
Self-extinguishing



> 700 N/100 mm

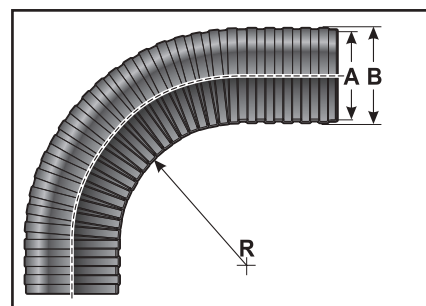


Suitable fittings:
m-top, -tec, -fix, -jumbo, KFW, AT

Self-extinguishing cable protection conduit for medium mechanical stresses with good chemical resistance.

Applications:

- Plant engineering
- Mechanical engineering
- Chemical plants



EW-PP



Type	Order no.	Colour	A Ø mm	B Ø mm	R mm static	R mm dyn.	Weight kg/100 m	Pack m
EW-PP-M10/P7	83201050	black	8.5	11.2	21.0	70.0	1.3	50
EW-PP-M12/P9	83201052	black	9.8	13.0	26.0	80.0	2.4	50
EW-PP-M16/P11	83201054	black	12.0	15.8	33.0	100.0	3.5	50
EW-PP-M20/P16	83201056	black	15.8	21.0	46.0	180.0	5.2	50
EW-PP-M20/P16S*	83201057	black	16.6	21.0	41.0	170.0	5.2	50
EW-PP-M25/P21	83201058	black	22.5	28.5	59.0	230.0	9.3	50
EW-PP-M32/P29	83201060	black	29.0	34.5	72.0	280.0	11.0	25
EW-PP-M40/P36	83201062	black	36.0	42.5	86.0	310.0	15.8	25
EW-PP-M50/P48	83201064	black	47.5	54.5	107.0	350.0	20.5	25
EW-PP-70 Jumbo	83201066	black	67.5	80.0	160.0	600.0	41.0	25
EW-PP-95 Jumbo	83201068	black	91.5	106.0	200.0	800.0	75.0	10
EW-PP-M10/P7	83201010	grey	8.5	11.2	21.0	70.0	1.3	50
EW-PP-M12/P9	83201012	grey	9.8	13.0	26.0	80.0	2.4	50
EW-PP-M16/P11	83201014	grey	12.0	15.8	33.0	100.0	3.5	50
EW-PP-M20/P16	83201016	grey	15.8	21.0	46.0	180.0	5.2	50
EW-PP-M25/P21	83201018	grey	22.5	28.5	59.0	230.0	9.3	50
EW-PP-M32/P29	83201020	grey	29.0	34.5	72.0	280.0	11.0	25
EW-PP-M40/P36	83201022	grey	36.0	42.5	86.0	310.0	15.8	25
EW-PP-M50/P48	83201024	grey	47.5	54.5	107.0	350.0	20.5	25
EW-PP-70 Jumbo	83201026	grey	67.5	80.0	160.0	600.0	41.0	25
EW-PP-95 Jumbo	83201028	grey	91.5	106.0	200.0	800.0	75.0	10
* Narrow corrugation								