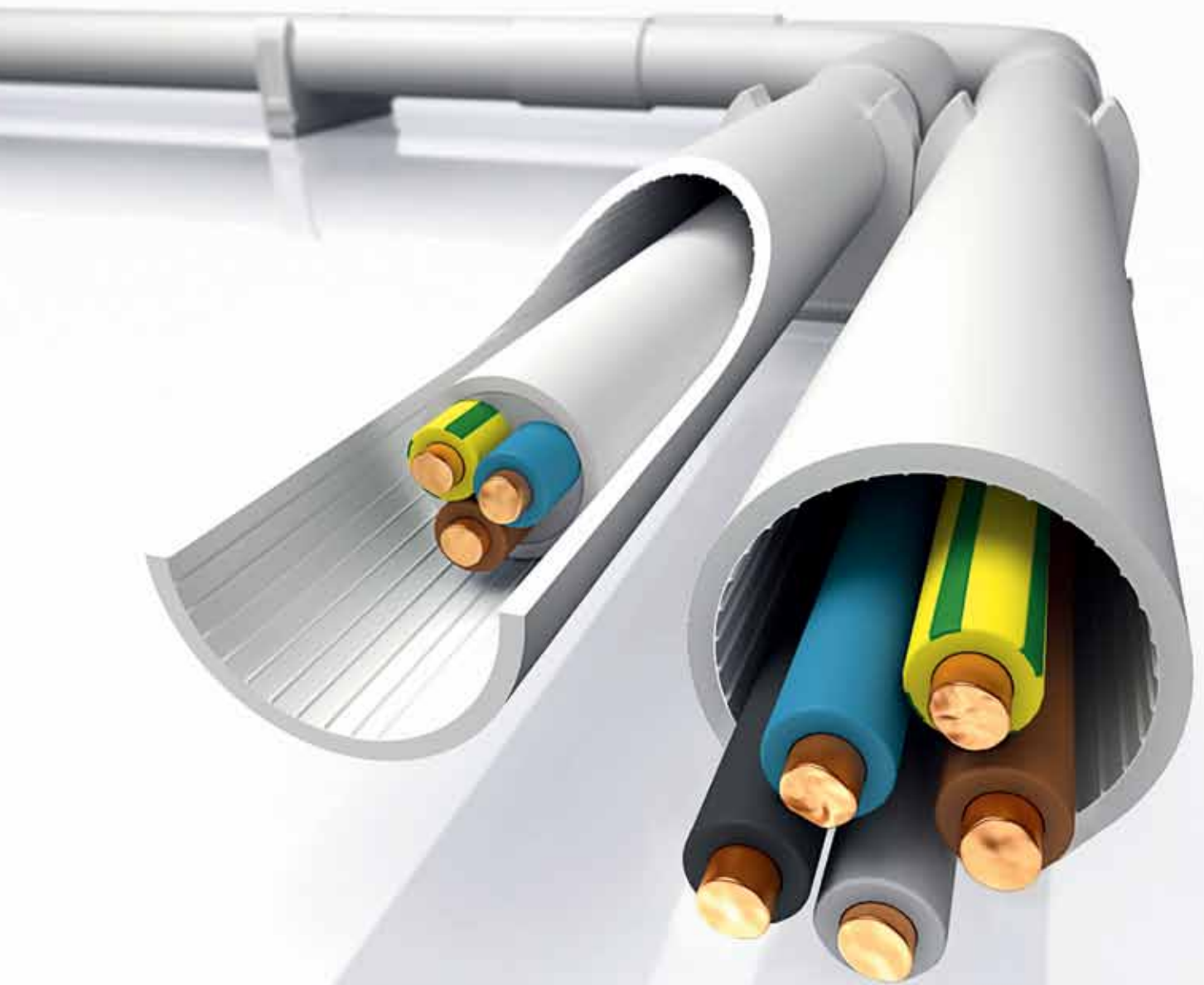


Conduits

Mureva GT

Feel the difference with
Groove Technology



New design
– feel the difference
and save up to

55%

of cable insertion
time, with the GT
(Groove Technology)
function.

Forget about conventional conduits – the Mureva Tube GT is here

So you thought all conduits were the same? Well, let's reconsider what parts to use in your installations. Imagine a completely new type of conduit, which will supply new heights of easiness and comfort. The Mureva GT will drastically speed up the work. Take a closer look!

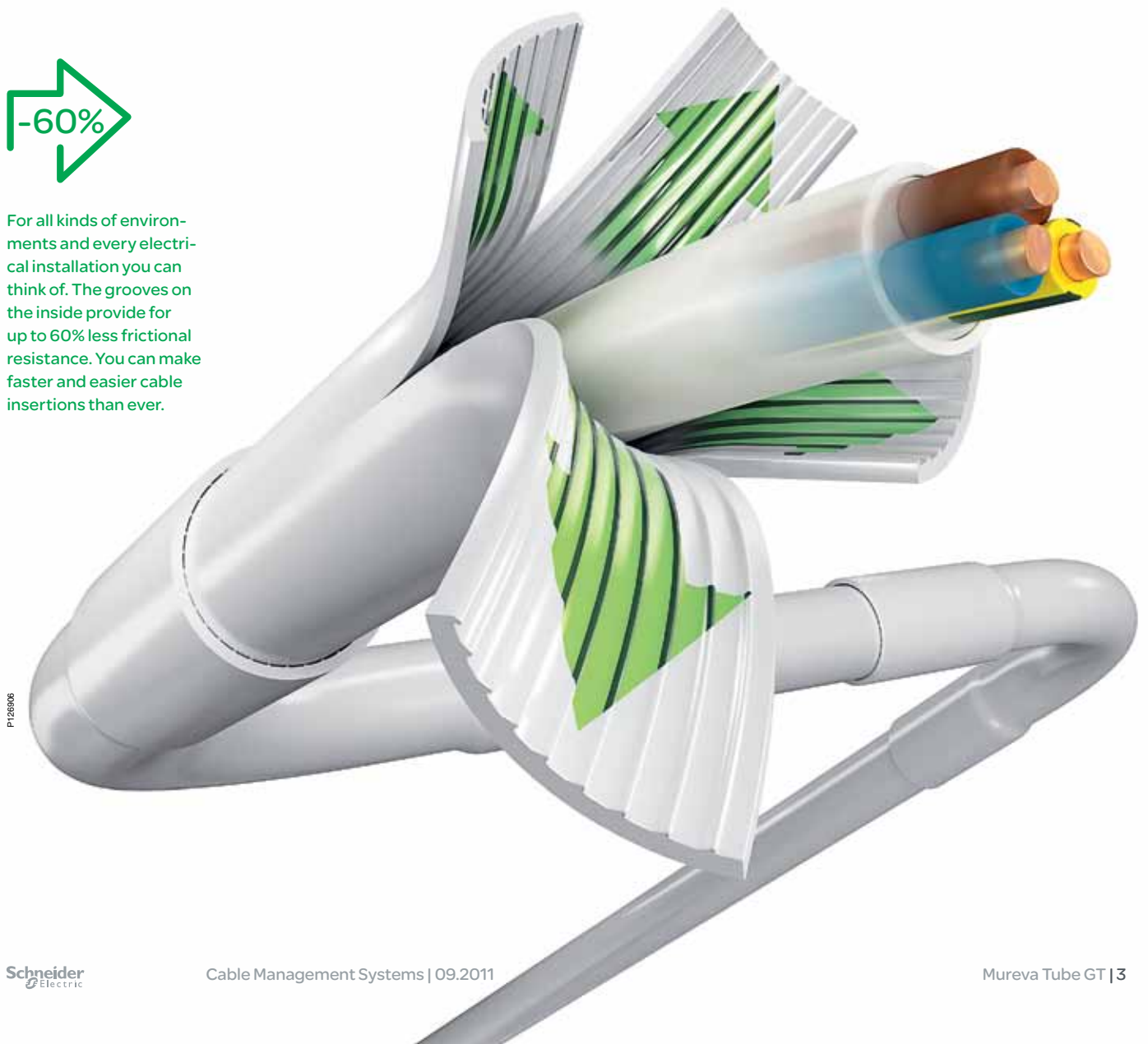
Now you can make significant improvements on all types of electrical installations. You can work quicker with less effort without compromising on the advantages of conventional conduits. The GT (Groove Technology) function is applied to all types of our new Mureva conduits, regular PVC rigid conduits as well as flexible and halogen-free ones.

With faster and easier cable insertions thanks to the innovative GT function, the Mureva Tube GT will lower your effort and raise your profit. You will see immediate results in quicker cable insertions, better work conditions and an overall improved satisfaction with your installations.



For all kinds of environments and every electrical installation you can think of. The grooves on the inside provide for up to 60% less frictional resistance. You can make faster and easier cable insertions than ever.

P128906



The complete cable management system

Mureva Conduits with GT function

Now it's time to put an end to twisty and complicated electrical installations. With the completely new design of the inside surface, the Mureva Tube GT provides for fast and easy cable insertions. This new feature has also been applied to various accessories within the Mureva GT range, which provides for fast, tidy and homogeneous electrical installations in any type of environment.



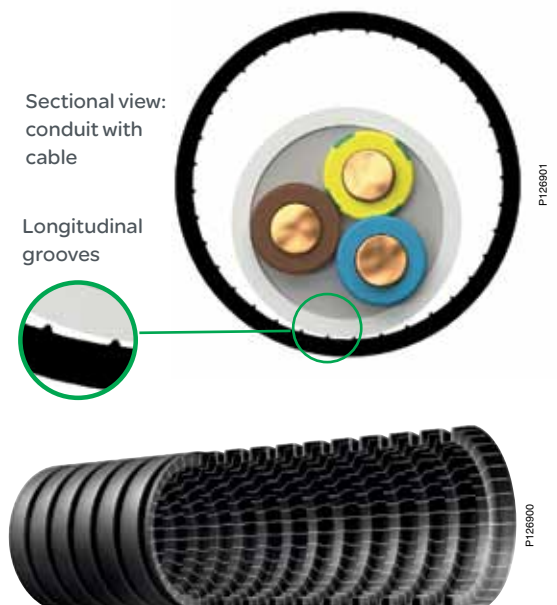
P126525

The GT function – feel the difference, also in the long run

So what is the GT function? All our Mureva GT conduits are equipped with longitudinal grooves which offer much less frictional resistance than conventional conduits. Studies have shown that the cable installation time can be reduced by up to 55% and installation efforts by up to 60%. Try it out – you can really feel the difference!

Sectional view: conduit with cable

Longitudinal grooves



P126901

P126800



PVC

Rigid Mureva Tube GT

The PVC conduits are sturdy and robust, yet easy to work with. Unlike many other types of rigid conduits, they bend easily without breaking.

Ø16, 20, 25, 32 mm. Length: 2 or 3 m
Ø40, 50, 63 mm. Length: 3 m

Halogen-free

Rigid Mureva Tube GT HF

These halogen-free, fire retardant conduits provide for safe and fast installations in various environments.

Ø16, 20, 25, 32, 40, 50 mm. Length: 3 m

Flexible Mureva Flex GT HF

Our range of flexible halogen-free conduits gets you around every corner of a tricky installation – swift and with better fire safety.

Ø16, 20, 25 mm. Length: 50 m
Ø32, 40, 50 mm. Length: 25 m

Very heavy-duty Mureva Tube GT HF

Halogen-free conduits for the toughest environments, such as road tunnels, heavy industries and undergrounds. Can be delivered in specific colours on request for easy and distinct colour coding.

Ø16, 20, 25, 32, 40, 50 mm. Length: 3 m



Even small amounts of halogen substances contaminate nature and are a hazard for the environment. For your safety the whole Mureva range is halogen-free. In case of fire, no hazardous fumes will evaporate, risking health of living beings. Halogen-free is a quality mark for you as an installer.



Mureva Tube GT PVC Conduit

At first sight, there's no difference from conventional conduits. All good qualities are there – along with a few more. In addition to the GT function, our PVC conduits are sturdy, yet easy to bend without breaking.

The Mureva GT PVC conduits are robust and strong, yet smooth to work with. We have invited our customers, provided them with a bending spring and let them try out the capacity of the Mureva GT conduits themselves. The conduits bend easily and won't break.

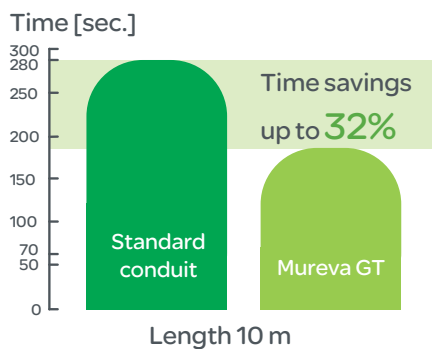
But the most important feature of the Mureva GT is of course the GT function. This new design is applied to all our Mureva GT conduits.

The Mureva GT PVC conduits are suitable for concrete walls in various types of environments. With a wide range of accessories, the whole installation will be great-looking and easy to maintain.



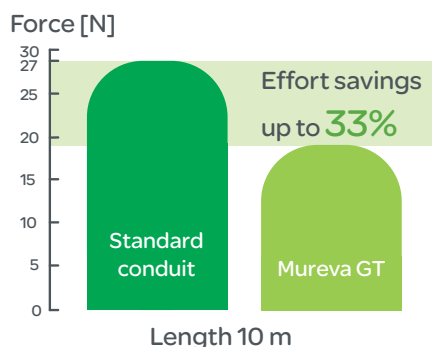
Less time

When using the Mureva GT conduits with the GT function, your electrical installations are performed up to 32% faster!



Less effort

Besides being versatile, reliable and resistant, the Mureva GT conduits are equipped with the GT function which reduces cable insertion efforts with up to 33%.



Use the Mureva Junction boxes as a safe connection point for conduits. All the five different boxes have flexible grommets up to 25 mm which ensures an IP55 classified installation.



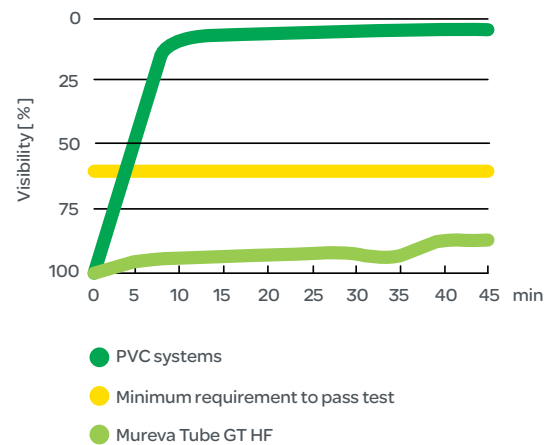
The future is halogen-free

In many European countries today, the use of halogen-free electrical installation material is a standard. Due to regulations regarding fire safety, many installations with parts containing halogen are prohibited. And frankly – what’s the use of using halogen-free cables if the conduits are made of PVC?

So what are halogens? Fluorine, chlorine, bromine and iodine are halogens. In small quantities they are not only harmless, but even essential for various chemical processes in the earth crust and in the oceans. But by the increased use of halogens in electrical products and other “unnatural” environments, the hazardous effects have become clear. As a matter of fact, halogens are extremely toxic and cause severe harm to all living organisms. The negative impact on hormones, metabolism, memory function, nervous system etc. is obvious. The harmful effects of halogens are evident when it comes to fire and smoke. Safety in case of fire is a matter of proper planning, and should be just as an important ingredient in the planning procedure as adequate construction strength and easy access to power and network.

Smoke density

Test developed by London Underground for halogen-free and low smoke materials.



Test: IEC61034, EN50286



A busy underground platform at rush-hour. If there’s a fire, limited smoke release with a minimum of toxic gases is crucial for survival.



Mureva Tube GT HF



PVC



With a low-smoke halogen-free environment you have a better chance to survive. Just compare the two pictures to the right.

Halogen-free – in case of fire

When exposed to fire, materials containing halogens release corrosive toxic gases which are extremely harmful to people, buildings and even sensitive technical equipment. The gases react with humidity and water and form highly corrosive acids. Ironically, this means that also the fire-fighting in itself is a risk. Therefore, using halogen-free electrical equipment is a wise choice – a fact that many large construction companies all over Europe have realized. Today halogen-free installations are provided as a standard for a variety of new building projects, such as hospitals and undergrounds.



LSFOH

Mureva GT halogen-free conduits (except the Very heavy duty range) meet LSFOH, an international product standard .

LS = Low Smoke
F = Flame retardant
OH = Zero halogen

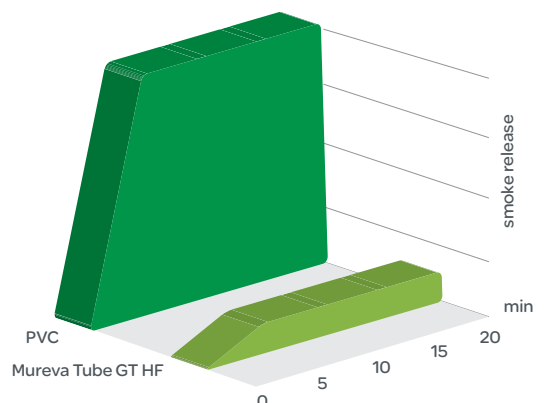
In case of fire, being able to breathe is essential, as well as finding your way out. In addition to the hazardous effects of the smoke, materials that release large amounts of smoke also increase the risk of a flash-over, i.e. self-ignition of fumes and gases. Add to that the negative effects of the smoke on expensive electrical equipment – a fact that can lead to devastating results for many companies.

The smoke release in a halogen-free environment is less than 90% compared to an environment with conventional PVC plastics. Based on the fact that 80% of all fire victims die of smoke intoxication, the decision to choose low-smoke halogen-free electrical installations should be easy to make.

The Mureva GT and Mureva Flex GT low-smoke halogen-free conduit systems are indispensable as a complement to halogen-free cables. Due to

excellent thermal, mechanical and chemical characteristics, the Mureva GT HF conduits are also suitable for a wider range of applications than conventional plastics. The graphs on this spread illustrate the benefits of using halogen-free products, based on the parameters of smoke release, temperature, fire development etc.

Optical smoke density 90% lower than PVC





Mureva Tube GT HF

Halogen-free, rigid

In premises where a lot of people move about or that contain valuable material assets, a fire can be devastating. Theatres, libraries and museums with invaluable treasures are subject to strict rules regarding fire safety. In such environments halogen-free electrical installations is a must.

If there's a fire, electrical installations with non-toxic halogen-free materials will considerably increase the chance of survival. That goes for both people and sensitive electrical equipment. And the outcome is crucial for the survival of a company itself.



Order any colour

The standard colour of the Mureva Tube GT HF is black, but it can be delivered in any colour on request.

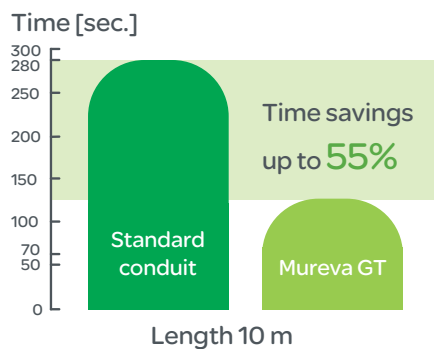
Halogen-free installations – a wise choice

Today, many large construction companies all over Europe provide halogen-free installations as a standard for a variety of new building projects.



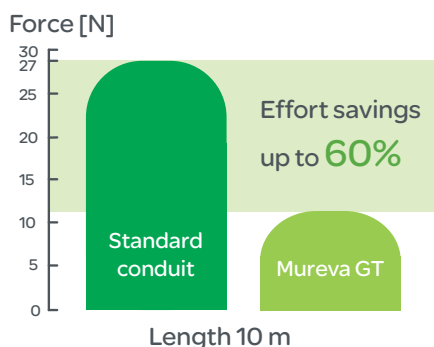
Less time

By using the Mureva Tube GT with the GT function, you can save up to 55% in cable insertion time.



Less effort

With the Mureva Tube GT conduits, the electrical installations become more effortless than ever.







Mureva Flex GT HF

Halogen-free, flexible

Perhaps the ultimate choice when it comes to installations in tight spaces? The Mureva GT HF flexible conduit is easy to handle and has outstanding properties against hazardous smoke from fires. Furthermore, it's resistant to impacts and compression as well as to oil, acid and low temperatures.

Add to that the GT function and the superb flexibility, and you are probably equipped with the most complete conduit solution there is.

Appropriate premises are hotels and office buildings, laboratories, hospitals, schools, shopping centres, and high technology industrial plants.

Our Mureva Flex GT conduits are suitable for installations in hollow walls, together with our Multifix Air box assortment and Thorsman TCS clips.



P126804

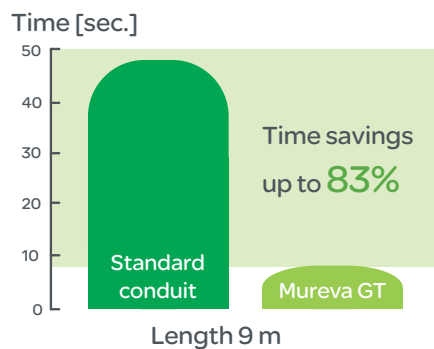


P126863



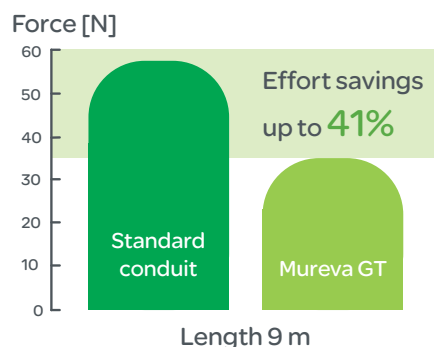
Less time

The Mureva Flex GT HF is superb when it comes to time savings. You can save up to 83% in cable insertion time compared to conventional flexible conduits.



Less effort

With the Mureva GT, the traction force needed to pull cables through a conduit is up to 41% less than with standard conduits.







Mureva Tube GT HF

Very heavy-duty

Tough environments demand materials that withstand the harsh conditions. The Mureva Tube GT, very heavy-duty, provides outstanding properties. The conduits are designed for installations in industries, tunnels, oil rigs, subways, nuclear plants etc.

Our very heavy-duty halogen-free conduits are resistant to heat, below zero temperatures and acids. Together with the excellent fire safety properties, they are the perfect choice for installations in the toughest and most demanding environments. Another feature is the opportunity to choose colour. Installations in nuclear plants for instance, demand clear colour coding to meet the rigid safety requirements.



Colour-coding for increased safety

As a standard the Mureva GT very heavy-duty conduit is black, but any colour can be delivered on request.

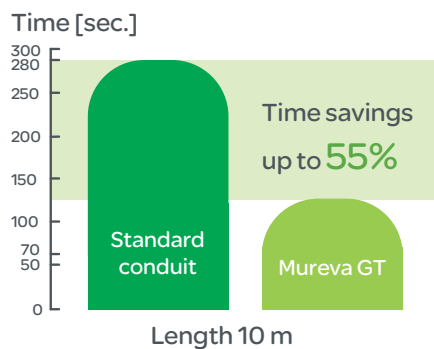
For the very tough environments

An oil rig in the middle of the North Sea – one of the toughest places imaginable. And the ideal environment for installing the Mureva GT very heavy-duty.



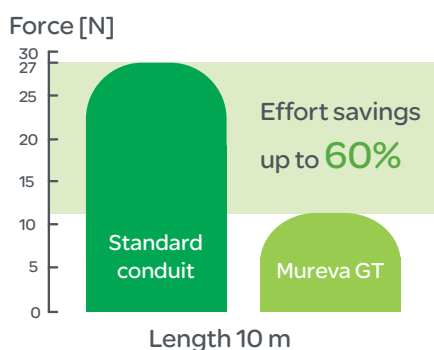
Less time

With a standard conduit, the cable gets stuck after approximately 8 m. The Mureva GT allows the whole cable to be inserted by its full length within 2,5 minutes.



Less effort

With the Mureva GT, the traction force needed to pull cables through a conduit is up to 60% less than with standard conduits.



Some Mureva GT accessories

Bend “All-in-one” for swift cable insertion

GT function is applied in the bends for fast and easy cable management. Tulips in both end of the bend speeds up the installation even more.



T-section, openable. For neat and narrow bends

The openable T-section allows a neat and easy installation and narrow bends. Just open up, do what needs to be done, and close. An absolute need for comfortable installation and maintenance.



Instacable conduit clip, for secure fixing

The Instacable conduit clip has an integrated cable tie for easy fastening of conduits, Ø16–32 mm or 40–63 mm. The clip can be fixed with a Murafix plug or with a screw.



Clip TCS, for reliable fixing in concrete or plaster

The clip is robust and fastens easily in a variety of materials. The screw is sharp with a large pitch and a Phillips X head.



Openable jointing sleeve, also for reparations

This sleeve comes very handy if an accident occurs and the conduit breaks. Just slide on the sleeve over the crack, close it and you are ready to go. The tightening features makes the sleeve specially suitable for flush-mounted installations in concrete walls.



Conduit clip, for various diameters

The conduit clips are available for diameters from 16 up to 50 mm. A groove on one side and a tongue on the other allows easy snap-fitting independent of clip size. The conduit clip is fixed with a screw to the wall.



Mureva Tube, PVC conduits

Type	Inner Ø (mm)	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
Conduits, plain ends, medium-duty, grey						
Rigid, medium-duty, non-flame propagating conduit with groove technology and plain ends. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.						
Ø16 mm	13	Grey RAL 7035	Ø16/3000	75 m	3606480424557	IMT40316
			Ø16/2000	50 m	3606480424625	IMT40416
Ø20 mm	16.9	Grey RAL 7035	Ø20/3000	51 m	3606480424564	IMT40320
			Ø20/2000	34 m	3606480424632	IMT40420
Ø25 mm	21.4	Grey RAL 7035	Ø25/3000	51 m	3606480424571	IMT40325
			Ø25/2000	34 m	3606480424649	IMT40425
Ø32 mm	27.8	Grey RAL 7035	Ø32/3000	30 m	3606480424588	IMT40332
			Ø32/2000	20 m	3606480424656	IMT40432
Ø40 mm	35.4	Grey RAL 7035	Ø40/3000	21 m	3606480424595	IMT40340
Ø50 mm	44.3	Grey RAL 7035	Ø50/3000	12 m	3606480424601	IMT40350
Ø63 mm	57.3	Grey RAL 7035	Ø63/3000	9 m	3606480424618	IMT40363
Conduits, plain ends, medium-duty, white						
Rigid, medium-duty, non-flame propagating conduit with groove technology and plain ends. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.						
Ø16 mm	13	White RAL 9010	Ø16/3000	75 m	3606480424779	IMT49316
Ø20 mm	16.9	White RAL 9010	Ø20/3000	51 m	3606480424786	IMT49320
Ø25 mm	21.4	White RAL 9010	Ø25/3000	51 m	3606480424793	IMT49325
Conduits, tuliped end, medium-duty, grey						
Rigid, medium-duty, non-flame propagating conduit with groove technology and one tuliped end. The tuliped end allows jointing to another conduit with the same diameter. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.						
Ø16 mm	13	Grey RAL 7035	Ø16/3000	75 m	3606480424700	IMT40616
			Ø16/2000	50 m	3606480424663	IMT40516
Ø20 mm	16.9	Grey RAL 7035	Ø20/3000	51 m	3606480424717	IMT40620
			Ø20/2000	34 m	3606480424670	IMT40520
Ø25 mm	21.4	Grey RAL 7035	Ø25/3000	51 m	3606480424724	IMT40625
			Ø25/2000	34 m	3606480424687	IMT40525
Ø32 mm	27.8	Grey RAL 7035	Ø32/3000	30 m	3606480424731	IMT40632
			Ø32/2000	20 m	3606480424694	IMT40532
Ø40 mm	35.4	Grey RAL 7035	Ø40/3000	21 m	3606480424748	IMT40640
Ø50 mm	44.3	Grey RAL 7035	Ø50/3000	12 m	3606480424755	IMT40650
Ø63 mm	57.3	Grey RAL 7035	Ø63/3000	9 m	3606480424762	IMT40663
Conduits, tuliped end, medium-duty, white						
Rigid, medium-duty, non-flame propagating conduit with groove technology and one tuliped end. The tuliped end allows jointing to another conduit with the same diameter. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.						
Ø16 mm	13	White RAL 9010	Ø16/3000	75 m	3606480424809	IMT49616
Ø20 mm	16.9	White RAL 9010	Ø20/3000	51 m	3606480424816	IMT49620
Ø25 mm	21.4	White RAL 9010	Ø25/3000	51 m	3606480424823	IMT49625

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Mureva Tube, PVC conduits

Type	Inner Ø (mm)	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
Conduits, tuliped end, medium-duty, DIY						
Rigid, medium-duty, non-flame propagating conduit with groove technology and one tuliped end. The tuliped end allows jointing to another conduit with the same diameter. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. The product is intended for the DIY-market. Material: PVC.						
Ø16 mm	13	Grey RAL 7035	Ø16/3000	75 m	3606480424472	IMT40116
			Ø16/2000	50 m	3606480424519	IMT40216
Ø20 mm	16.9	Grey RAL 7035	Ø20/3000	51 m	3606480424489	IMT40120
			Ø20/2000	34 m	3606480424526	IMT40220
Ø25 mm	21.4	Grey RAL 7035	Ø25/3000	51 m	3606480424496	IMT40125
			Ø25/2000	34 m	3606480424533	IMT40225
Ø32 mm	27.8	Grey RAL 7035	Ø32/3000	30 m	3606480424502	IMT40132
			Ø32/2000	20 m	3606480424540	IMT40232

P120674



P120675



Mureva Tube, PVC conduit accessories

Bending springs						
Bending spring for conduits with a diameter of Ø16, Ø20 or Ø25 mm. To be used when bending the conduit to a desired shape. The product is intended for conduits with groove technology. Material: Steel.						
For conduits Ø16 mm	—	—	Ø10/800	1	3606480446900	IMT46016
For conduits Ø20 mm	—	—	Ø20/800	1	3606480446917	IMT46020
For conduits Ø25 mm	—	—	Ø25/800	1	3606480446924	IMT46025

P120680



Conduit sleeves, medium-duty						
Medium-duty conduit sleeve. To be used for the jointing of conduits. Mechanical impact resistance 6 Joule and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. The Ø16–Ø40 sizes ensure an IP41-seal, whereas the Ø50 and Ø63 sizes are IP40. Material: PVC.						
Ø16 mm	—	Grey RAL 7035	Ø19/48	100	3295150413160	ENN41316
		White RAL 9010		100	3295150419162	ENN41916
Ø20 mm	—	Grey RAL 7035	Ø23/48	100	3295150413207	ENN41320
		White RAL 9010		100	3295150419209	ENN41920
Ø25 mm	—	Grey RAL 7035	Ø28/52	50	3295150413252	ENN41325
		White RAL 9010		50	3295150419254	ENN41925
Ø32 mm	—	Grey RAL 7035	Ø36/64	25	3295150413320	ENN41332
Ø40 mm	—	Grey RAL 7035	Ø43/104	1	3295150413405	ENN41340
Ø50 mm	—	Grey RAL 7035	Ø55/120	1	3295150413504	ENN41350
Ø63 mm	—	Grey RAL 7035	Ø67/150	1	3295150413634	ENN41363

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P120846



P120843



P120844



P120845



Mureva Tube, PVC conduit accessories



Type	Inner Ø (mm)	Colour	Dimensions A/B/C (mm)	Qty per package	EAN code	Ref. No.		
Bends, medium-duty								
Medium-duty, non-flame propagating bend with groove technology. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.								
P120847 P120851		Ø16 mm	13	Grey RAL 7035 White RAL 9010	113/Ø19/113	100 100	3295150433168 3295150439160	IMT43316 IMT43916
		Ø20 mm	16.9	Grey RAL 7035 White RAL 9010	130/Ø23/130	50 50	3295150433205 3295150439207	IMT43320 IMT43920
P120848		Ø25 mm	21.4	Grey RAL 7035 White RAL 9010	188/Ø28/188	20 20	3295150433250 3295150439252	IMT43325 IMT43925
		Ø32 mm	27.8	Grey RAL 7035	240/Ø35/240	1	3295150433328	IMT43332
P120849		Ø40 mm	35.4	Grey RAL 7035	300/Ø43/300	1	3295150433403	IMT43340
		Ø50 mm	44.3	Grey RAL 7035	350/Ø55/350	1	3295150433502	IMT43350
P120850		Ø63 mm	57.3	Grey RAL 7035	420/Ø68/420	1	3295150433632	IMT43363

Elbows, medium-duty

Medium-duty, non-flame propagating elbow consisting of two parts that are snapped together. Can be used for sharp bends. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.

P120852 P120854		Ø16 mm	—	Grey RAL 7035 White RAL 9010	39/Ø21/39	50 50	3295150423169 3295150429161	ENN42316 ENN42916
		Ø20 mm	—	Grey RAL 7035 White RAL 9010	47/Ø23/47	50 50	3295150423206 3295150429208	ENN42320 ENN42920
P120853 P120855		Ø25 mm	—	Grey RAL 7035 White RAL 9010	59/Ø31/59	25 25	3295150423251 3295150429253	ENN42325 ENN42925

T-sections, medium-duty

Medium-duty, non-flame propagating tee-section consisting of two parts that are snapped together. Can be used for sharp bends. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -5°C – +60°C. Base classification 3321 according to IEC 61386. Degree of protection IP40. Material: PVC.

P120856 P120858		Ø16 mm	—	Grey RAL 7035 White RAL 9010	56/Ø20/39	50 50	3295150443167 3295150449169	ENN44316 ENN44916
		Ø20 mm	—	Grey RAL 7035 White RAL 9010	70/Ø25/48	50 50	3295150443204 3295150449206	ENN44320 ENN44920
P120857 P120859		Ø25 mm	—	Grey RAL 7035 White RAL 9010	86/Ø31/59	25 25	3295150443259 3295150449251	ENN44325 ENN44925

Mureva Fix, fixing accessories

Instaclips

Instaclip conduit clip for conduits with various diameters, see below. The instaclip can be fixed with a Murafix plug or with a screw. The clip is provided with a band that is snapped around the conduit to hold it in place and fitted into a slot on the clip. To be used both indoors and outdoors.

Material: PA.

P120861 P120860		For Ø16 and 20 mm conduits	Grey RAL 7035 White RAL 9010	16/16/76	100 100	3295150450202 3295150459205	ENN45020 ENN45920
		For Ø25 mm conduits	Grey RAL 7035 White RAL 9010	14/16/92	100 100	3295150450257 3295150459250	ENN45025 ENN45925

Instacables

Instacable conduit clip with an integrated cable tie, for conduits with a diameter of 16-32 mm or 40-63 mm. The instacable clip can be fixed with a Murafix plug or with a screw. All colours to be used both indoors and outdoors, whereas the black clips is specially suited for outdoor use.

Material: PA.

P120891, P120893 P120892		For Ø16-32 mm conduits	Grey RAL 7035 White RAL 9010 Black RAL 9005	15/13/170	100 100 100	3295150479302 3295150479395 3295150479357	ENN47930 ENN47939 ENN47935
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Mureva Fix, fixing accessories



Type	Colour	Dimensions A/B/C (mm)	Qty per package	EAN code	Ref. No.
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Instacables, cont.

For Ø40-63 mm conduits	Grey RAL 7035	15/13/300	100	3295150479609	ENN47960
	Black RAL 9005		100	3295150479654	ENN47965

P120694
P120686



Instacables with Murafix plugs

Instacable conduit clip with an integrated cable tie, for conduits with a diameter of 16-32 mm or 40-63 mm. The instacable clip can be fixed with the included Murafix plug or with a screw. To be used both indoors and outdoors.
Material: PA.

For Ø16-32 mm conduits, incl. Murafix plugs	Grey RAL 7035	15/13/170	100	3295150479333	ENN47933
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P120887



For Ø40-63 mm conduits, incl. Murafix plugs	Grey RAL 7035	15/15/300	100	3295150479630	ENN47963
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P120888



Conduit clips

Conduit clip for conduits with various diameters, see below. The conduit clip can be fixed with a Murafix plug, with a screw or by using the conduit clip rail.
Material: PA.

Ø16 mm	Grey RAL 7035	27/12/22	100	3295150451162	ENN45116
	White RAL 9010		100	3295150458161	ENN45816

P120680
P120682



Ø20 mm	Grey RAL 7035	29/12/26	50	3295150451209	ENN45120
	White RAL 9010		50	3295150458208	ENN45820

P120680
P120683



Ø25 mm	Grey RAL 7035	36/12/30	50	3295150451254	ENN45125
	White RAL 9010		50	3295150458253	ENN45825

P120681
P120684



Rail for conduit clips

Rail for the fixing of conduit clips with diameters 16, 20 or 25 mm.
Material: PA.

Conduit clip rail	Grey RAL 7035	11/22/202	25	3295150451261	ENN45126
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P120685



Murafix plug

Murafix wall plug for 6 or 8 mm holes, suitable for concrete walls. The Murafix plug has two functions. It can either be used as a threaded stud bolt for the mounting of threaded products such as conduit fixings or Mureva surface mounted boxes. Or it can be used as a drill plug by removing the threaded bolt part with a cutting tool.
Material: PA.

M8 wall plug	Grey RAL 7035	Ø9/50	100	3295150489349	ENN48934
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P120841



M6 wall plug	Grey RAL 7035	Ø9/40	200	3295150489356	ENN48935
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P120840



Mureva Tube, halogen-free conduits

Type	Inner Ø (mm)	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
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Rigid conduits, plain ends, heavy-duty

Rigid heavy-duty conduit with plain ends. The material of the conduit is halogen-free. Mechanical impact resistance 6 Joule and compression resistance 1250 N. Temperature range -25°C – +90°C. Base classification 4442 according to IEC 61386. Material: PC/ABS.



P133944 P133945	Ø20 mm	15.8	Black RAL 9005 White RAL 9010	20/2900	107.3 m	3606480458453 3606480459016	IMT49032 IMT49088
	Ø25 mm	20.6	Black RAL 9005 White RAL 9010	25/2900	55.1 m	3606480458460 3606480459023	IMT49033 IMT49089
P133946 P133947	Ø32 mm	26.6	Black RAL 9005 White RAL 9010	32/2900	55.1 m	3606480458477 3606480459030	IMT49034 IMT49090
	Ø40 mm	34.4	Black RAL 9005 White RAL 9010	40/2900	20.3 m	3606480458484 3606480459047	IMT49035 IMT49091
	Ø50 mm	43.2	Black RAL 9005 White RAL 9010	50/2900	20.3 m	3606480458491 3606480459054	IMT49036 IMT49092

Rigid conduits, tuliped end, medium-duty

Rigid medium-duty conduit with groove technology and one tuliped end. The tuliped end allows jointing to another conduit with the same diameter. The material of the conduit is halogen-free and has low smoke and fumes (LSF) qualities. Mechanical impact resistance 1 Joule and compression resistance 750 N. Temperature range -25°C – +105°C. Base classification 3243 according to IEC 61386. Degree of protection IP30.

Material: PP.



P128872	Ø16 mm	11	Black RAL 9005	16/3000	111 m	3606480427909	IMT49013
	Ø20 mm	15	Black RAL 9005	20/3000	111 m	3606480427916	IMT49014
P128871	Ø25 mm	20	Black RAL 9005	25/3000	57 m	3606480427923	IMT49015
	Ø32 mm	27	Black RAL 9005	32/3000	57 m	3606480427930	IMT49016
	Ø40 mm	34	Black RAL 9005	40/3000	21 m	3606480458309	IMT49017
	Ø50 mm	44	Black RAL 9005	50/3000	21 m	3606480458316	IMT49018

Rigid conduits, plain ends, medium-duty

Rigid medium-duty conduit with groove technology and plain ends. The material of the conduit is halogen-free and has low smoke and fumes (LSF) qualities. Mechanical impact resistance 1 Joule and compression resistance 750 N. Temperature range -25°C – +105°C. Base classification 3243 according to IEC 61386. Degree of protection IP30.

Material: PP.



P125463	Ø20 mm	15	Black RAL 9005 White RAL 9010	20/2900	107.3 m	3606480473609 3606480473654	IMT49093 IMT49098
	Ø25 mm	20	Black RAL 9005 White RAL 9010	25/2900	55.1 m	3606480473616 3606480473661	IMT49094 IMT49099
P125462	Ø32 mm	27	Black RAL 9005 White RAL 9010	32/2900	55.1 m	3606480473623 3606480473678	IMT49095 IMT49100
	Ø40 mm	34	Black RAL 9005 White RAL 9010	40/2900	20.3 m	3606480473630 3606480473685	IMT49096 IMT49101
	Ø50 mm	44	Black RAL 9005 White RAL 9010	50/2900	20.3 m	3606480473647 3606480473692	IMT49097 IMT49102

Mureva Tube, halogen-free sleeves and bends

Bends, medium-duty

Medium-duty bend of halogen-free material. Mechanical impact resistance 1 Joule and compression resistance 750 N. Temperature range -25°C – +90°C. Base classification 3243 according to IEC 61386. Degree of protection IP30.

Material: PC/ABS.



P125435 P128865	Ø16 mm	11	Black RAL 9005	18/80/80	25	3606480458323	IMT49019
	Ø20 mm	15	Black RAL 9005 White RAL 9010	22/110/110	25	3606480458330 3606480473708	IMT49020 IMT49103
P125434 P128864	Ø25 mm	20	Black RAL 9005 White RAL 9010	27/142/142	20	3606480458347 3606480473715	IMT49021 IMT49104
	Ø32 mm	27	Black RAL 9005 White RAL 9010	35/175/175	50	3606480458354 3606480473722	IMT49022 IMT49105
	Ø40 mm	34	Black RAL 9005 White RAL 9010	43/235/235	35	3606480458361 3606480473739	IMT49023 IMT49106
	Ø50 mm	44	Black RAL 9005 White RAL 9010	53/290/290	20	3606480458378 3606480473746	IMT49024 IMT49107

Mureva Tube, halogen-free sleeves and bends

Type	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
Conduit sleeves, medium-duty					
Medium-duty conduit sleeve of halogen-free material. To be used for the jointing of conduits. Mechanical impact resistance 1 Joule and compression resistance 750 N. Temperature range -25°C – +90°C. Base classification 3243 according to IEC 61386. Degree of protection IP30. Material: PC/ABS.					
Ø16 mm	Black RAL 9005	52/20/20	100	3606480458385	IMT49025
	White RAL 9010				
Ø20 mm	Black RAL 9005	53/24/24	100	3606480458392	IMT49026
	White RAL 9010			3606480473753	IMT49108
Ø25 mm	Black RAL 9005	57/29/29	50	3606480458408	IMT49027
	White RAL 9010			3606480473760	IMT49109
Ø32 mm	Black RAL 9005	62/37/37	25	3606480458415	IMT49028
	White RAL 9010			3606480473777	IMT49110
Ø40 mm	Black RAL 9005	72/45/45	25	3606480458422	IMT49029
	White RAL 9010			3606480473784	IMT49111
Ø50 mm	Black RAL 9005	86/55/55	15	3606480458439	IMT49030
	White RAL 9010			3606480473791	IMT49112

Mureva Tube, halogen-free couplers and adaptors

Expansion couplers					
Expansion coupler intended for use in installations where the temperature fluctuates resulting in linear expansion. Temperature range -25°C – +90°C. Material: PC/ABS.					
20 mm	Black RAL 9005 White RAL 9010	125/28/28	50	3606480458644 3606480458811	IMT49051 IMT49068
25 mm	Black RAL 9005 White RAL 9010	101/22/22	25	3606480458651 3606480458828	IMT49052 IMT49069
32 mm	Black RAL 9005 White RAL 9010	125/28/28	9	3606480458965 3606480486067	IMT49083 IMT49241
40 mm	Black RAL 9005 White RAL 9010	190/44/44	10	3606480458972 3606480486074	IMT49084 IMT49242
50 mm	Black RAL 9005 White RAL 9010	200/54/54	6	3606480458989 3606480486081	IMT49085 IMT49243






Adaptors					
Adaptor with female thread and male bush for connection of rigid or pliable conduits to junction boxes and enclosures. Temperature range -25°C – +90°C. Material: PC/ABS.					
20 mm	Black RAL 9005 White RAL 9010	38/21/21	100	3606480458842 3606480458873	IMT49071 IMT49074
25 mm	Black RAL 9005 White RAL 9010	49/31/31	50	3606480458859 3606480458880	IMT49072 IMT49075
32 mm	Black RAL 9005 White RAL 9010	56/35/35	20	3606480458866 3606480458897	IMT49073 IMT49076
40 mm	Black RAL 9005 White RAL 9010	60/47/47	25	3606480485763 3606480485787	IMT49234 IMT49236
50 mm	Black RAL 9005 White RAL 9010	75/57/57	10	3606480485770 3606480485794	IMT49235 IMT49237

Mureva Tube, halogen-free circular boxes



Circular box intended for coupling in a conduit system. Available for Ø20 and Ø25 mm conduits and with one, two, three or four spouts in various directions. Temperature range -25°C – +90°C. Material: PC/ABS.

One-way boxes					
20 mm	Black RAL 9005 White RAL 9010	89/65/32	25	3606480458507 3606480458675	IMT49037 IMT49054
25 mm	Black RAL 9005 White RAL 9010	92/65/32	25	3606480458576 3606480458743	IMT49044 IMT49061
Two-way boxes, through-way					
20 mm	Black RAL 9005 White RAL 9010	109/65/32	25	3606480458514 3606480458682	IMT49038 IMT49055
25 mm	Black RAL 9005 White RAL 9010	120/65/32	25	3606480458583 3606480458750	IMT49045 IMT49062
Two-way boxes, two-way angle					
20 mm	Black RAL 9005 White RAL 9010	89/89/32	25	3606480458521 3606480458699	IMT49039 IMT49056
25 mm	Black RAL 9005 White RAL 9010	92/92/32	25	3606480458590 3606480458767	IMT49046 IMT49063


Mureva Tube, halogen-free circular boxes

Type	Inner Ø (mm)	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
Two-way boxes, U-way						
 P126884 P133943	20 mm	Black RAL 9005 White RAL 9010	89/65/32	20	3606480458538 3606480458705	IMT49040 IMT49057
	25 mm	Black RAL 9005 White RAL 9010	92/65/32	20	3606480458606 3606480458774	IMT49047 IMT49064
Three-way boxes, T-way						
 P126886 P126878	20 mm	Black RAL 9005 White RAL 9010	109/89/32	25	3606480458545 3606480458712	IMT49041 IMT49058
	25 mm	Black RAL 9005 White RAL 9010	118/92/32	20	3606480458613 3606480458781	IMT49048 IMT49065
Three-way boxes, Y-way						
 P133936 P133935	20 mm	Black RAL 9005 White RAL 9010	109/65/32	20	3606480458552 3606480458729	IMT49042 IMT49059
	25 mm	Black RAL 9005 White RAL 9010	118/92/32	20	3606480458620 3606480458798	IMT49049 IMT49066
Four-way boxes						
 P136885 P126874	20 mm	Black RAL 9005 White RAL 9010	109/109/32	20	3606480458569 3606480458736	IMT49043 IMT49060
	25 mm	Black RAL 9005 White RAL 9010	118/118/32	10	3606480458637 3606480458804	IMT49050 IMT49067
Four-way boxes, H-way						
 P133942 P133941	20 mm	Black RAL 9005 White RAL 9010	109/65/32	20	3606480485688 3606480485701	IMT49226 IMT49228
	25 mm	Black RAL 9005 White RAL 9010	118/65/32	20	3606480485695 3606480485718	IMT49227 IMT49229

Mureva Tube, halogen-free circular covers with extension rings

Circular covers						
Circular cover intended for use as a spare cover for circular boxes. Temperature range -25°C – +90°C. Material: PC/ABS.						
 P126880 P126873	Cover	Black RAL 9005 White RAL 9010	65/65/2	100	3606480458668 3606480458835	IMT49053 IMT49070
	Extension rings					
Extension ring to be used for making the circular box higher. Temperature range -25°C – +90°C. Material: PC/ABS.						
 P133937 P133938	Ø 20 mm	Black RAL 9005 White RAL 9010	65/65/20	20	3606480485725 3606480485749	IMT49230 IMT49232
	Ø 40 mm	Black RAL 9005 White RAL 9010	65/65/40	25	3606480485732 3606480485756	IMT49231 IMT49233

Mureva Flex, halogen-free conduits

Flexible conduits							
Flexible conduit, UV-stable, with groove technology. The material of the conduit is halogen-free and has low smoke and fumes (LSF) qualities. Mechanical impact resistance 2 Joule and compression resistance 750 N. Temperature range -25°C – +105°C. Base classification 3343 according to IEC 61386. Material: PP.							
 P126890 P126889	Ø16 mm	9.9	Black RAL 9005	16/50000	50 m	3606480383847	IMT49003
	Ø20 mm	13	Black RAL 9005	20/50000	50 m	3606480383854	IMT49004
	Ø25 mm	17	Black RAL 9005	25/50000	50 m	3606480383861	IMT49005
	Ø32 mm	23.5	Black RAL 9005	32/25000	25 m	3606480383878	IMT49006
	Ø40 mm	30	Black RAL 9005	40/25000	25 m	3606480424922	IMT49007
	Ø50 mm	38	Black RAL 9005	50/25000	25 m	3606480424939	IMT49008

Mureva Tube, halogen-free conduits

Type	Inner Ø (mm)	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
Couplers						
Coupler of halogen-free material, with locking tabs for a secure fixing of the flexible conduits and ensuring an IP67-seal. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -25°C – +105°C. Base classification 3343 according to IEC 61386. Material: PP.						
Ø16 mm	—	Black RAL 9005	52/20/20	100	3606480424946	IMT49009
Ø20 mm	—	Black RAL 9005	56/22/22	100	3606480427879	IMT49010
Ø25 mm	—	Black RAL 9005	55/29/29	50	3606480427886	IMT49011
Ø32 mm	—	Black RAL 9005	62/37/37	25	3606480427893	IMT49012

P126879



P126870



Joining sleeve

Joining sleeve for 16 mm and 20 mm flexible conduits. Intended for jointing or for repair of cracked flexible conduits. The sleeve has a hinge function that makes it possible to open and close it around the ends of two conduits, thus providing a joint or repairing a crack. Temperature range -25°C – +60°C. Material: PP.



Ø16 mm	—	Grey	21/21/60	20	3606480397936	IMT10102
Ø20 mm	—	Green	25/25/60	20	3606480397929	IMT10101

P126813



P126812



Conduits, plain ends, very heavy-duty

Rigid, very heavy-duty, halogen-free and non-flame propagating conduit with groove technology and plain ends. Mechanical impact resistance 20.4 Joule (IK10) and compression resistance 1250 N. Temperature range -45°C – +120°C. Base classification 4554 according to IEC 61386. Material: PC.

Ø16 mm	11.8	Black RAL 9005	Ø16/3000	75 m	3606480385575	IMT35200
Ø20 mm	15.8	Black RAL 9005	Ø20/3000	51 m	3606480385582	IMT35201
Ø25 mm	20.2	Black RAL 9005	Ø25/3000	51 m	3606480385599	IMT35202
Ø32 mm	25.9	Black RAL 9005	Ø32/3000	30 m	3606480385605	IMT35203
Ø40 mm	34.6	Black RAL 9005	Ø40/3000	21 m	3606480385612	IMT35204
Ø50 mm	43.3	Black RAL 9005	Ø50/3000	12 m	3606480385629	IMT35205

P125463



P125462



Mureva Tube, halogen-free accessories

Conduit sleeves, very heavy-duty

Very heavy-duty, halogen-free and non-flame propagating conduit sleeve, to be used for the jointing of conduits. Fire resistance acc to standard C STB M1. Mechanical impact resistance 20.4 Joule (IK10) and compression resistance 1250 N. Temperature range -45°C – +120°C. Base classification 4554 according to IEC 61386. The sleeve ensures an IP41-seal. Material: PC.

Ø16 mm	—	Black RAL 9005	Ø20/51	50	3606480385698	IMT35212
Ø20 mm	—	Black RAL 9005	Ø24/54	50	3606480385704	IMT35213
Ø25 mm	—	Black RAL 9005	Ø29/57	50	3606480385711	IMT35214
Ø32 mm	—	Black RAL 9005	Ø37/61	50	3606480385728	IMT35215
Ø40 mm	—	Black RAL 9005	Ø45/71	25	3606480385735	IMT35216
Ø50 mm	—	Black RAL 9005	Ø55/86	25	3606480385742	IMT35217

P125437

P125436



Bends, very heavy-duty

Very heavy-duty, halogen-free and non-flame propagating bend. Fire resistance acc to standard C STB M1. Mechanical impact resistance 20.4 Joule (IK10) and compression resistance 1250 N. Temperature range -45°C – +120°C. Base classification 4554 according to IEC 61386. The bend ensures an IP40-seal. Material: PC.

Ø16 mm	—	Black RAL 9005	100/Ø20/100	50	3606480385636	IMT35206
Ø20 mm	—	Black RAL 9005	115/Ø24/115	50	3606480385643	IMT35207
Ø25 mm	—	Black RAL 9005	135/Ø29/135	50	3606480385650	IMT35208
Ø32 mm	—	Black RAL 9005	225/Ø37/225	50	3606480385667	IMT35209
Ø40 mm	—	Black RAL 9005	285/Ø45/285	15	3606480385674	IMT35210
Ø50 mm	—	Black RAL 9005	335/Ø55/335	8	3606480385681	IMT35211

P125435

P125434



Mureva Tube, halogen-free accessories

P125438
P125439

Type	Colour	Dimensions Ø/length (mm)	Qty per package	EAN code	Ref. No.
T-sections, very heavy-duty					
Very heavy-duty, halogen-free and non-flame propagating tee-section. The tee-section consists of two parts that are snapped together. Fire resistance acc to standard C STB M1. Mechanical impact resistance 2 Joule (IK07) and compression resistance 750 N. Temperature range -25°C – +120°C. Base classification 3344 according to IEC 61386. The tee-section ensures an IP40-seal. Material: PC/ABS.					
Ø16 mm	Black RAL 9005	56/Ø20/39	50	3606480385810	IMT35224
Ø20 mm	Black RAL 9005	70/Ø25/48	50	3606480385827	IMT35225
Ø25 mm	Black RAL 9005	86/Ø31/59	50	3606480385834	IMT35226

Mureva Fix, halogen-free fixing accessories

P125440
P125441P125442
P125443P125444
P125445

Conduit clips, heavy-duty

Heavy-duty, halogen-free, non-flame propagating conduit clip for conduits with various diameters, see below. The clips are provided with a groove on one side and a tongue on the other, which allows them to be snap-fitted to one another, independent of the clip size. The conduit clip is fixed with a screw. Temperature range -25°C – +90°C.
Material: PC/ABS.

Ø16 mm	Black RAL 9005	25/12/24	100	3606480385759	IMT35218
Ø20 mm	Black RAL 9005	28/12/29	100	3606480385766	IMT35219
Ø25 mm	Black RAL 9005	36/12/36	100	3606480385773	IMT35220
Ø32 mm	Black RAL 9005	46/12/43	100	3606480385780	IMT35221
Ø40 mm	Black RAL 9005	47/14/55	50	3606480385797	IMT35222
Ø50 mm	Black RAL 9005	55/14/64	50	3606480385803	IMT35223


Spacer bar saddle

Spacer bar saddle to be used for the fixing of conduits to the wall. Temperature range -25°C – +90°C.
Material: PC/ABS.

P133839
P133840

Ø20 mm	Black RAL 9005	64/20/26	50	3606480486098	IMT49244
	White RAL 9010			3606480486449	IMT49249
Ø25 mm	Black RAL 9005	64/20/31	50	3606480486104	IMT49245
	White RAL 9010			3606480486456	IMT49250
Ø32 mm	Black RAL 9005	80/26/39	50	3606480486111	IMT49246
	White RAL 9010			3606480486463	IMT49251
Ø40 mm	Black RAL 9005	102/32/49	25	3606480486425	IMT49247
	White RAL 9010			3606480486470	IMT49252
Ø50 mm	Black RAL 9005	102/32/62	25	3606480486432	IMT49248
	White RAL 9010			3606480486487	IMT49253

Other products, compatible with Mureva

Type	Colour	Dimensions A/B/C (mm)		Qty per package	EAN code	Ref. No.
Wall plugs						
Double-expanding, easy-to-install wall plug, colour coded for easy size identification. To be used in applications where shear loads dominate. Suitable for concrete, stone, lightweight concrete, expanded clay, hollow bricks and blocks, solid bricks and plasterboard. Material: Polyethylene (HD).						
TP1	Yellow	5.5/22		500 100	7315881001026 7315880100003	1001 023 1001 025
TP 6x30	Red	6/30		100 250	7315881003020 7315880100010	1003 020 1003 029
TP2B	Brown	8/40		100	7315881005017	1005 016
Clip with screw, PH head						
Plastic clip with screw, intended for indoor or outdoor installation in walls and ceilings, with or without wall plug. Screw with surface treatment acc. to corrosivity class C3 and cross-slotted head type Phillips 2. For round cables. Material: PP/Steel.						
TCS-C3 14-18 For 14-18 mm cables/conduits	Black	38/23/5		100	7315882190033	2190 032
TCS-C3 18-22 For 18-22 mm cables/conduits	Black	41/23/5		50	7315882190040	2190 042
TCS-C3 22-26 For 22-26 mm cables/conduits	Black	45/23/5		50	7315882190057	2190 052
Clip with screw, T20 head						
Plastic clip with screw, intended for indoor or outdoor installation in walls and ceilings, with or without wall plug. Screw with surface treatment acc. to corrosivity class C3 and cross-slotted head type T20. For round cables. Material: PP/Steel.						
TCS-X-C3 14-18 For 14-18 mm cables/conduits	Black	38/23/5		100	7332418019408	2191 045
TCS-X-C3 18-22 For 18-22 mm cables/conduits	Black	41/23/5		50	7332418019439	2191 060
TCS-X-C3 22-26 For 22-26 mm cables/conduits	Black	45/23/5		50	7332418019460	2191 075
Conduit cutter						
Conduit cutter for conduits. Suitable for conduits with a diameter of Ø16–Ø32 mm in all plastic materials. Material: Steel.						
Conduit cutter	Blue	190/25/180		1	7315880096573	1773 125

P125019

P125018

P125017

P90904

P128882

Medium-duty PVC conduits

Certification	Certified acc. to IEC 61386-1.
Flame resistance	Non-flame propagating
Mechanical impact resistance	2 Joule (IK07)
Compression resistance	750 N
Degree of protection	IP40. With sleeves Ø16-40 mm IP41.
Temperature range	-5°C – +60°C
Base classification	3321
Material	PVC (polyvinyl chloride)
Colour	<ul style="list-style-type: none"> • Grey RAL 7035 • White RAL 9010

Medium-duty HF conduits

Certification	Certified acc. to IEC 61386-1.
Mechanical impact resistance	1 Joule
Compression resistance	750 N
Degree of protection	IP30
Temperature range	-25°C – +105°C
Base classification	3243
Material	PP (polypropylene), halogen-free
Colour	<ul style="list-style-type: none"> • Black RAL 9005 • White RAL 9010

Flexible HF conduits

Certification	Certified acc. to IEC 61386-1.
Mechanical impact resistance	2 Joule (IK07)
Compression resistance	750 N
Degree of protection	With couplers IP67.
Temperature range	-25°C – +105°C
Base classification	3343
Material	PP (polypropylene), halogen-free
Colour	Black RAL 9005

Very heavy-duty HF conduits

Certification	Certified acc. to IEC 61386-1.
Mechanical impact resistance	20.4 Joule (IK10)
Compression resistance	1250 N
Degree of protection	With T-sections and bends IP40, with sleeves IP41.
Temperature range	-45°C – +120°C
Base classification	4554
Material	PC (polycarbonate)
Colour	Black RAL 9005

Accessories

Material	PC/ABS (polycarbonate / acrylonitrile-butadiene-styrene), halogen-free
Colour	<ul style="list-style-type: none"> • Black RAL 9005 • White RAL 9010
Material	PA (polyamide)
Colour	<ul style="list-style-type: none"> • Grey RAL 7035 • Black RAL 9005 • White RAL 9010

LSF0H - Definition and Standards

LSF0H is a summary of different product properties regarding fire behaviour and describes:

- Quantity of smoke generated in case of fire (LS – low smoke)
- Fire behaviour (F – flame retardant)
- Halogen content (OH – zero halogen)

Depending on the particular product the relevant tests are in accordance with different standards (the term was originally coined in the cable industry and has been used for years as a sales argument to summarise the above mentioned properties but without a defined standard background).

Our Conduits for electrical installations are subject to the following tests:

Fire behaviour

The fire behaviour is tested according to EN 50086-2-1, the correct term under this standard for concurrent properties is "non-flame propagating".

The test is conducted on the finished product as test samples.

Halogen content

The content of halogens is assessed acc. to IEC 60754-1/IEC 60754-2 resp. EN 50267-2-1/EN 50267-2-2 which determines the amount of acid gas evolving under defined burning conditions. The test is widely used for cables as well as for plastic conduits for electrical installations. Conduits are considered as halogenfree if they contain no more than 0.5 % of acid gases.

Low smoke emission

The test used by Schneider is the so called "three meter cube test" according to IEC 61034/EN 50268 which is basically designed for cables and, therefore, needs some modification for conduits. After flaming a finished product, the smoke density is measured and recorded. If the remaining visibility is not lower than 60 % the products pass the test. This applies to all Schneider halogen-free products.

1. Products from Plastic Materials

The resistance against chemical attack depends basically on the mechanical stress on the plastic part, the time of exposure, the temperature and the concentration of the media. In view of the various environmental conditions laboratory tests under standard conditions are only of limited value for practical use. Under critical conditions tests should be made according to actual conditions to be stated by the user. For more detailed information concerning the chemical resistance of installation systems from synthetic materials please turn to the table 'Chemical Resistance'.

Mechanical stress and temperature influence:

Mechanical stress can be minimised at the installation, taking care that the system is installed being as stressfree as possible, e.g. using large bending radii, leaving space for thermal expansion at the joints and taking care that fixings are not fastened too firmly. When using insulating systems at higher temperatures, the thermal expansion must be taken into account to avoid later stresses on the installed system by using expansion joints and allowing gliding within the fixings. At higher temperatures it must be taken into consideration that especially in sealed closed systems, temperatures may occur exceeding the surrounding temperatures. This can be due to additional heat emitted by the cables or heat radiation (sunlight!). The following survey gives general information about possible incompatibilities occurring during installation or use.

1.1 Chemical resistance of PVC products

PVC offers excellent resistance against most chemicals used in the building industry. Care shall be taken with chemicals like carbon tetrachlorid, acetone, chlorinated hydrocarbons and benzene.

1.2 Chemical resistance of halogen-free products based on PC

These materials offer in general a good resistance against various chemicals, however, some chemical agents are capable of attacking PC: Oils, fats, greases and fuel. The material is sensitive to some additives sometimes contained in lubricants. This applies especially to cutting oils, hydraulic oils, break fluid, soya-oil and edible fats and oils. Care shall be taken also with petrol and diesel oil.

Additives for concrete and lubricants for formwork:

A test is in any case advisable. Generally speaking, the material is not resistant against additives containing ester, aether, aldehydes, ketones, amines or chlorinated hydrocarbon. This holds especially for wet cement which contains caustic soda and shall not be used for embedding in concrete. Furthermore, the material must not be brought into contact with lubricants for formworks.

Cleaners and degreasing agents:

Cleaning of the material should be made with plain water or mild soapy water, never with abrasive pads or solvents like alcohol or benzene. Care must be taken when cleaning parts which are mounted near the installation systems, as solvents may come in contact with the material and could cause stress cracking.

Resistance against cables (especially from soft PVC):

PVC-cables may contain softeners which evaporate in closed installation systems especially at higher temperatures and cause stress cracking. Also some rubber cables may contain additives which are not compatible with the material.

Resistance against cable-lubricants:

Cable lubricants which are based on fat can cause cracking. For installation systems based on PC it is recommended to abstain from the use of cable lubricants at all (especially at higher temperature).

Paints, corrosion inhibitors and sealing coatings:

These materials may be critical in respect of the contained solvents. Compatibility should be checked in every case.

Sealings:

The material offers in general good resistance against silicones. In case of a high content of additives chemical incompatibility may occur. Polyurethane foam may affect the material, a prior test is recommended. This holds also for sealing materials from nitrile rubber.

Adhesives, glues:

We recommend the use of our approved sealing cement "HVKS 310", other adhesives or glues may affect the material. The compatibility of other adhesives and glues should be checked in every case.

Chemical resistance of plastic materials			
Chemical substances	°C	PVC	PC
Acetaldehyde, aqueous (40%)	40	!	–
Acetic acid (<10%)	40	√	√
Acetic acid (10% - 85%)	60	√	–
Acetic acid (85% - 95%)	40	√	–
Acetic acid (>95%)	20	√	–
Acetone (traces)	20	–	–
Ammonia, aqueous (20%)	40	√	–
Ammonia, dry	60	√	–
Ammonium fluoride (2%)	20	√	!
Aniline (saturated)	60	!	–
Arsenic acid (<20%)	60	√	√
Beer	60	√	!
Benzene	20	–	–
Bleaching agent (13%)	40	√	!
Borax, aqueous	60	√	!
Bromic acid, aqueous (10)	20	√	–
Butane, gaseous		√	√
Carbonid acid, dry	40	√	√
Carbonid acid, dry or humid	40	√	!
Carbon tetrachloride	20	–	–
Carbon disulphide	20	!	–
Caustic soda (<40%)	40	√	–
Caustic soda (40% - 60%)	60	√	–
Cement, dry	20	√	√
Cement, mixed	20	√	–
Chloric gas, dry or humid	20	!	–
Chloric water	20	!	–
Chlorinated hydrocarbons		–	–
Chlorosulfuric acid (100%)	20	!	–
Chromium acid, aqueous (<50%)	50	√	–
Chromium acid (20%)		!	√
Chromosulfuric acid (20%)		!	–
Citric acid (all)	60	√	√
Cresol, aqueous (<90%)	45	!	–
Cupric sulfate (all)	60	√	√
Diesel oil	20	√	!
Developer (photographic)	40	√	!
Dextrine (18%)	20	√	!
Ester		–	–
Ethyl alcohol, aqueous (<40%)	40	√	!
Ethyl ether	20	–	!
Fatty acid	20	√	!
Fixing bath	40	√	!
Fluorochlorinated hydrocarbons		√	√
Formaldehyde, aqueous (all)	30	√	!
Formic acid (<30%)	40	√	!
Formic acid (concentrated)	20	√	–
Glycerine, aqueous	60	√	!
Hydrochloric acid (weak)	40	√	!
Hydrochloric acid (concentrated)	60	√	–
Hydrofluorisilic acid, aqueous (<32.5%)	60	√	√
Hydrofluoric acid, aqueous (<40%)	20	√	–
Hydrogen (100%)	60	√	√
Hydrogen peroxide (20%)	20	√	!
Hydrogen sulphide, dry or humid	60	√	!
Hydrogen sulphide, aqueous	40	√	!
Ketone		–	–
Lactic acid, aqueous (1%)	40	√	√
Methyl alcohol, aqueous (all)	40	√	–
Mineral oil	20	√	!
Nitric acid (<30%)	40	√	–
Nitric acid (30% - 45%)	45	√	–
Nitric acid (50% - 60%)	20	√	–
Nitric gases, dry or humid (weak)	60	!	–
Oils and fats (vegetable and organic)	60	√	–
Oxalic acid, aqueous (10%)	40	√	√
Oxalic acid, aqueous (concentrated)	60	√	–
Oxygen	60	√	!
Ozone	20	√	–
Permanganate (<6%)	20	√	!
Petrol, normal/premium	60	√	–
Petroleum	20	√	!
Phenol, aqueous (<90%)	45	!	–
Phosphoric acid, aqueous (<30%)	40	√	–
Phosphoric acid, aqueous (<30%)	60	√	–
Potash lye, aqueous (<40%)	40	√	–
Potash lye, aqueous (40% - 50%)	60	√	–
Potassium sodium lye (<40%)	40	√	–
Potassium sodium lye (40% - 50%)	60	√	–
Propane, liquid		√	√
Salt solution (all)	40	√	√
Seawater	40	√	!
Sulfur dioxide, aqueous (all)	40	√	!
Sulfuric acid, dry or humid (all)	60	√	!
Sulfuric acid, aqueous (<40%)	40	√	!
Sulfuric acid, aqueous (40% - 80%)	60	√	–
Sulfuric acid, aqueous (80% - 90%)	40	√	–
Sulfuric acid, aqueous (90% - 96%)	20	√	–
Sodium chloride solution (weak)	40	√	√
Tartaric acid (10%)	60	√	√
Urine	40	√	√
Water	60	√	√
Xylene (100%)	20	–	–
Zinc chloride, aqueous (all)	60	!	!
Zinc sulfate, aqueous (weak)	60	√	!

1.3 Chemical resistance of HF products based on PP

PP offer very good resistance against acids and lyes as well as oils and fats. Incompatibilities may occur at high temperatures and at very high concentrations of the chemical agent. Most suitable for these purposes is according to the current experience Loctite 406. Additionally, using our sealing cement „HVKS 310“ allows watertight connections of conduits and accessories.

List of symbols:

- √ The parts are resistant against chemical attack under conventional laying conditions.
- ! The parts are partially resistant against chemical attack under conventional laying conditions. It is strongly advised to investigate the actual conditions very carefully.
- The parts are not resistant against chemical attack.

Typical Mureva GT environments

PVC rigid Mureva Tube GT



Halogen-free rigid Mureva Tube GT



Halogen-free flexible Mureva Flex GT



Halogen-free very heavy-duty Mureva Tube GT



* Make the most of your energy

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As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.



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