

Description

UWEPEX is a complete plastic pipe installation system. It is a system consisting of the necessary pipes, fittings and tools that are matched. This is to ensure that the installation of UWE vehicle heating systems is easier, safer, more economical, and “environmental friendly” than ever before. The cornerstone of the UWEPEX system are the pipes made of PEX plastic and the unique Quick & Easy fitting technology, which makes installation easy and safe, and in less time.

UWEPEX Pipes

The UWEPEX pipes are made of PEX plastics, which is Crosslinked (X) Polyethylene (PE). This improves the high-temperature properties of the material and provides high cracking resistance and long-life shrinkage resistance. The UWEPEX pipe, produced since 1972, is a well-documented and thoroughly tested product.

PEX pipes have almost twice the insulation ability as copper pipes. This means less heat loss and less assembly time (no add-on insulation).

Quick & Easy

Quick & Easy is a state-of-the-art, quick and safe pipe connection technique. It is specially developed for PEX pipe installations, where the inherent elasticity and qualities of the material allow it to recover its original shape after treatment.



The idea of the Quick & Easy method is to expand the pipe and immediately fit the pipe to the fitting. After a few seconds when the pipe has shrunk on the fitting, the connection is finished. Just thirty minutes later, shrinking of the pipe has completely stopped and the system can be pressure tested.



Environmental factors

Another great advantage of the UWEPEX system is its environmental friendliness. The environmental benefits are summarized below for each system component.

Pipe material

PEX plastic is environmentally acceptable, produced in a manufacturing process with low energy consumption. The material can be burnt without forming toxic gases.

Fitting material

Most of the UWE fitting components are made of polyether sulphone plastic. This is a considerably better alternative than brass in terms of environmental impact, while at the same time making the fitting lighter and less expensive.

Quick & Easy technology

The joining of pipes using the Quick & Easy method does not require any compounding substance or a high energy source.

Weight factor

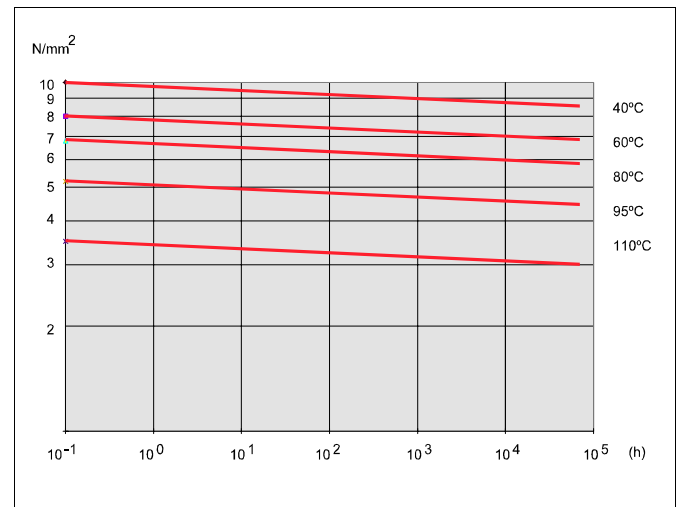
UWEPEX pipes weight much less than conventional pipes. That translates into savings for the entire process: transport goods-assembly-bus life.

Technical Specifications

Installation dimensions, mm.

UWEPEX 16	A=16 B=2.0	<p>B = wall thickness, mm</p> <p>A = outer diameter, mm</p>
UWEPEX 20	A=20 B=2.0	
UWEPEX 25	A=25 B=2.3	
UWEPEX 32	A=32 B=2.9	
UWEPEX 40	A=40 B=3.7	

The diagram below shows the strength properties of the material vs time for different operating temperatures.



Thermal properties

Operating temperature -100 till +110°C

Softening temperature +133°C

Coefficient of heat expansion 0,14 m/m°C *at 20°C*

0,205 m/m°C *at 100°C*

Thermal conductivity 0,38 W/m°C

Mechanical properties

Density 938 kg/m³





Operating pressure 6 bar *at 90° C*



Material



PEX-A Cross-linked Polythene


Product Range

UWEPEX Pipe & fittings





Description	Part no.
<p>UWEPEX Pipes UWEPEX pipes are produced in straight lengths of 5 m or in 50 m coils UWEPEX 16=16mm outside dia. L=length</p> 	
UWEPEX 16 L=5m	12170
UWEPEX 20 L=5m	12171
UWEPEX 25 L=5m	11463
UWEPEX 32 L=5m	11464
UWEPEX 40 L=5m	11465
UWEPEX 16 coil L=50m	12172
UWEPEX 20 coil L=50m	12173
UWEPEX 25 coil L=50m	12066
UWEPEX 32 coil L=50m	12077
UWEPEX 40 coil L=50m	12354
<p>QE-Rings QE-ring is used at every fitting end to provide additional strength. QE-ring 16=16 refers to the respective pipe size</p> 	
QE-ring 16	12479
QE-ring 20	12478
QE-ring 25	11466
QE-ring 32	11467
QE-ring 40	11468
<p>Connection fittings straight Used to join UWEPEX tubes QE16=16 refers to the respective pipe size.</p> 	
Connection straight QE16 plastic	12484
Connection straight QE20 plastic	12483
Connection straight QE25 plastic	12482
Connection straight QE32 plastic	12481
Connection straight QE40 plastic	12480
<p>Connection fittings elbow QE16=16 refers to the respective pipe size.</p> 	
Connection elbow QE16 plastic	12487
Connection elbow QE20 plastic	12486
Connection elbow QE25 plastic	12485

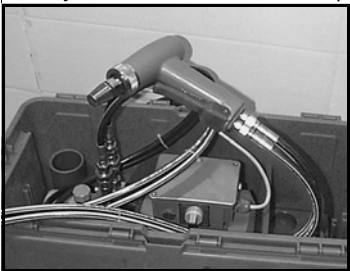
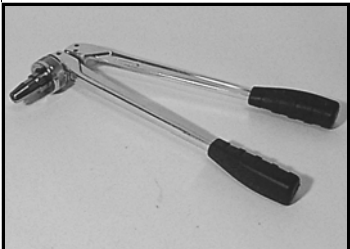

Description	Part no.
Connection elbow QE32 plastic	11482
Connection elbow QE40 plastic	11483
<p>Reducing joints Used as an aFittingdapter from one UWEPEX dimension to another QE20x16=respectve pipe sizes</p> 	
Reducing QE20x16 plastic	13840
Reducing QE25x16 plastic	13839
Reducing QE25x20 plastic	13838
Reducing QE32x25 plastic	13837
Reducing QE40x32 plastic	13836
<p>T-pipes QE16x16x16=pipe sizes (16 end x 16 middle x 16 end)</p> 	
T-pipe QE16x16x16 plastic	12489
T-pipe QE16x20x16 plastic	17553
T-pipe QE20x20x20 plastic	12488
T-pipe QE20x16x20 plastic	12495
T-pipe QE20x16x16 plastic	12496
T-pipe QE20x20x16 plastic	12494
T-pipe QE20x25x20 plastic	12493
T-pipe QE25x3/4"x25 <u>brass</u>	11484
T-pipe QE25x16x16 plastic	17554
T-pipe QE25x16x25 plastic	17555
T-pipe QE25x20x16 plastic	17556
T-pipe QE25x20x20 plastic	17557
T-pipe QE25x25x20 plastic	17558
T-pipe QE25x25x25 plastic	11485
T-pipe QE25x16x25 plastic	12491
T-pipe QE25x16x20 plastic	12492
T-pipe QE25x20x25 plastic	12490
T-pipe QE25x32x25 plastic	11488
T-pipe QE32x20x25 plastic	17559
T-pipe QE32x20x32 plastic	17560
T-pipe QE32x25x20 plastic	17561
T-pipe QE32x25x25 plastic	11487
T-pipe QE32x25x32 plastic	17569
T-pipe QE32x32x32 plastic	11486
T-pipe QE32x40x32 plastic	17562
T-pipe QE40x20x32 plastic	17563
T-pipe QE40x20x40 plastic	17564
T-pipe QE40x25x32 plastic	17565
T-pipe QE40x25x40 plastic	17566
T-pipe QE40x32x32 plastic	17567
T-pipe QE40x32x40 plastic	17568
T-pipe QE40x40x40 plastic	11573

<p>Adapter with male threads QE16=16 refers to the respective pipe size. G=straight pipe threads</p>	
Adapter QE16xG1/2" male	12174
Adapter QE20xG1/2" male	12175
Adapter QE20xG3/4" male	12176
Adapter QE25xG3/4" male	11469
Adapter QE25xG1" male	17572
Adapter QE32xG1" male	11471
Adapter QE40xG1" male	12497
Adapter QE40xG1 1/4" male	11495
Adapter QE16xR1/2" female	12177
Adapter QE20xR1/2" female	12179
Adapter QE20xR3/4" female	12178
Adapter QE25xR3/4" female	11470
Adapter QE32xR1" female	11473
Adapter with hose tube end (SRÄ)	
<p>Adapter with hose tube end (SRÄ) QE16=16 refers to the respective pipe size. SRÄ 18= refers to the respective hose size.</p>	
Adapter QE25xSRÄ18	13920
Adapter QE25xSRÄ22	11474
Adapter QE25xSRÄ28	12383
Adapter QE32xSRÄ28	11475
Adapter QE40xSRÄ35	14154
Adapter QE40xSRÄ38	11574

Adapter with unthreaded internal surface	
<p>Adapter with unthreaded internal surface Used for brazing to metal tubes QE16=16 refers to the respective pipe size. 15 female=inner diameter</p>	
Adapter QE16x15 female	18480
Adapter QE16x22 female	18481
Adapter QE20x15 female	14121
Adapter QE25x22 female	11476
Adapter QE25x28 female	18300
Adapter QE32x28 female	11477
Adapter QE40x35 female	12694
Adapter with swivel connection	
<p>Adapter with swivel connection QE16=16 refers to the respective pipe size. R½=conical ½ thread size</p>	
Adapter QE 16xR1/2" female swivel brass	12180
Adapter QE20xR1/2" female swivel brass	12181
Adapter QE20xR3/4" female swivel brass	12182
Adapter QE25xR3/4" female swivel brass	11472

Tools & Accessories

Description	Part No.
<p>Tools</p> <p>Q&E ProPEX Accu Set 230V <i>The tool will be supplied with a battery charger, 2 batteries, Molykote tool lubricant and operating manual in a black plastic carrying case, weight 8 kg.</i></p>  <p><i>Technical Data</i> Q&E ProPEX Accu tool: 14,4V 3,3 kg incl battery Working capacity: up to pipe size 40x3,7 mm (the tool manage 20 joints per battery charge at ambient temperature 20 °C). (Extra Accu for Propex: UWE nr. 18988)</p> <p>NOTE ! Expander heads must be ordered seperately (see page 7)</p>	18962
<p>GHA 550 Hydraulic Accu <i>Battery powered electric-hydraulic pump 550 bar with upper side handle and shoulder strap. Designed for intermittent operation. The pump is supplied with:</i></p> <ul style="list-style-type: none"> - one battery 28,8V 2,4Ah Ni-Cd, - 4 m hydraulic hose with quick coupling and electric operating cable - charger 28,8V/220V with CE plug, delivered in a cardboard box.  <p><i>Technical Data</i> Work capacity (with Q&E Pistol 40-550): 12 - 40x3,7 mm (with Q&E Pistol 63-550): 40x5,5 – 63x8,7 mm Charge time: 50 min. Weight: 9,5 kg (pump group incl. battery), 2,3 kg (charger) (Extra Accu for GHA550 Hydraulic Accu: UWE nr. 18963)</p> <p>NOTE ! Pistol not included in delivery (see info below) NOTE ! Expander heads must be ordered seperately (see page 7)</p>	18960
<p>PHE 550 Hydraulic <i>Electric-hydraulic pump 220V 50Hz, 550 bar with upper side handle. Designed for continuous operation. The pump is supplied with 4 m hydraulic hose with quick coupling and electric operating cable, delivered in a cardboard box.</i></p>  <p><i>Technical Data</i> Work capacity (with Q&E Pistol 40-550): 12 - 40x3,7 mm (with Q&E Pistol 63-550): 40x5,5 – 63x8,7 mm Weight: 17 kg</p> <p>NOTE ! Pistol not included in delivery (see info below) NOTE ! Expander heads must be ordered seperately (see page 7)</p>	18961
<p>Q&E Pistol 40-550 (for 18960 and 18961) Expander tool for GHA 550 Hydraulic Accu and PHE 550 Hydraulic. The tool is equipped with quick coupling and supplied in a black plastic carrying case with lubricant and operating manual. The carrying case has room to store 5 expander heads.</p>  <p>NOTE: Does not include expander heads, these are to be ordered separately, see page 7!</p> <p><i>Technical Data</i> Work capacity: 12 - 40x3,7 mm Weight: 1,5 kg (without expander head)</p>	18959

Description	Part No.
<p>UWEPEX Tool hydraulic <i>The hydraulic tool is delivered complete with hydraulic expander heads for dimensions 20, 25, 32 and 40</i></p> 	17468
<p>UWEPEX Tool manual11490 <i>The manual tool is delivered complete with manual expander heads for dimensions 16, 20, 25</i></p> 	11490
<p>Pipe cutter</p> 	11494
<p>Bocking 25mm</p>	17570
<p>Bocking 32mm</p>	17571

Description	Part No.
Expander heads	
Expander head UWEPEX 16 manual	12457
Expander head UWEPEX 20 manual	12458
Expander head UWEPEX 25 manual	12459
Expander head UWEPEX 20 hydraulic and electric	12456
Expander head UWEPEX 25 hydraulic and electric	11491
Expander head UWEPEX 32 hydraulic and electric New variant, black segments*	17460*
Expander head UWEPEX 40 hydraulic and electric New variant, double cone*	17114*
Expander head UWEPEX 32 hydraulic and electric Old performance to be used with old fittings*	11492*
Expander head UWEPEX 40 hydraulic and electric Old performance to be used with old fittings*	11493*
Grease for expander head	14276

**) Information regarding new and old Fittings*

All the 32mm and 40mm fittings have from today been replaced by a new variant with slightly larger diameter. For these fittings, new expander heads (17460 resp. 17114) must be used so that enough expansion will take place. The new variant of fittings can be identified with a "5" printed on the fitting, see figure below. The old fittings do not have a number 5.

Figure showing new fitting



It is not correct to use the new expander head (17460 or 17114) with the old fitting. If done, there will be a too wide expansion, which will lead to future leakage!

Spare Parts

Spare blades for cutter	14969
Assembly tool UWEPEX hydraulic for 11489	16828
Hydraulic pipe for 11489	15637

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