





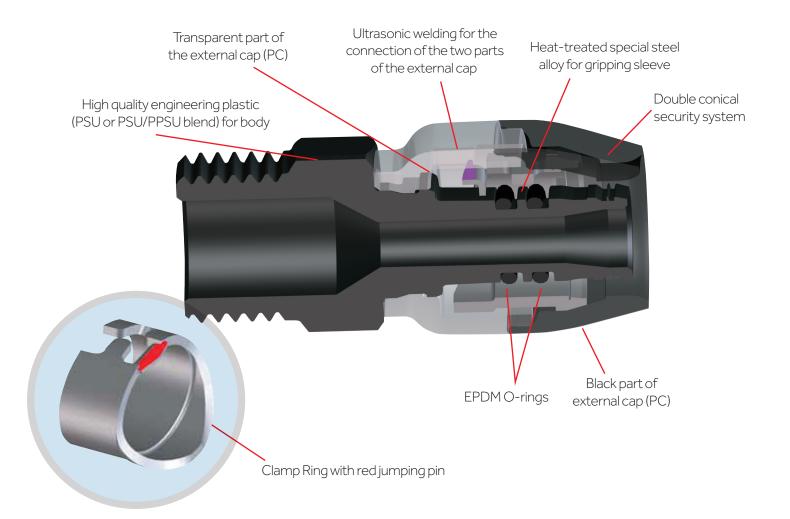
# The only tool-free press-fitting solution that works

Featuring a patented heat-treated spring steel clamp ring, the revolutionary "MECHFit" is the only tool-free press-fitting solution that guarantees a waterproof seal even as pipe dimension fluctuates. It's a next-gen solution that resolves the limitations of traditional push-fitting systems.



## **Built for function and durability**

Made with a fusion of cutting-edge metallic and polymeric materials, "MECHFit" is designed to offer exceptional performance while ensuring effortless usability and functionality.



## **Revolutionary engineering**



"MECHFit" easily locks into position with a single push into the pipe. No tools required!



#### Pin release

A red jumping pin releases upon connection, prompting the clamp ring to firmly compress around the pipe.



#### Unique spring effect

Compression from the clamp ring creates a special spring effect, allowing the fitting to flexibly accommodate any dimensional fluctuation.

## **Next-generation benefits**



## ONE-PUSH TECHNOLOGY

Anyone can install the "MECHFit" system with no need for tools or extensive training. Simply push, and go!



#### **VERSATILE**

Compatible with all types of sanitary, heating and chill water (FCU system) installations, including Multilayer and PEX pipes.



## TIME, COST AND LABOUR SAVING

Durable, efficient and easy-to-install, "MECHFit" minimises the need for maintenance and extra labour, maximising cost-effectiveness and productivity.



## **QUALITY GUARANTEE**

"MECHFit" is the evolution of tool-free fittings in Japan. With over 50 million units sold to date, it's a trusted brand with a quality quarantee.

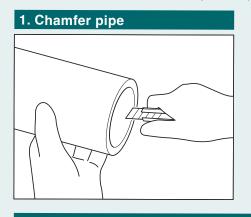


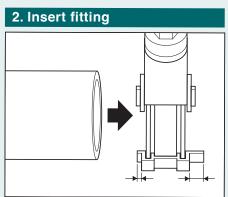
## Large piping. Minimal effort.

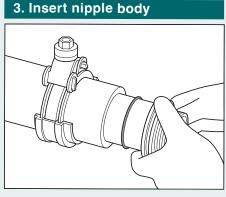
Toglit is the world's first pipe fitting solution to use the innovative "toggle method", or the toggle mechanism, to significantly reduce the work and effort required to firmly connect large piping.

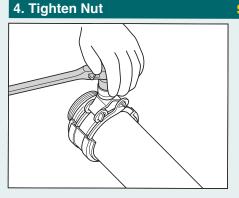


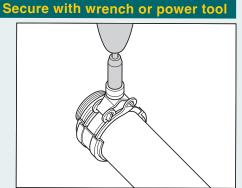
#### Installation in three, two, ONE MINUTE!

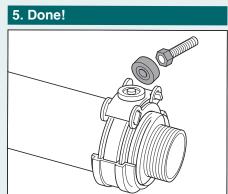




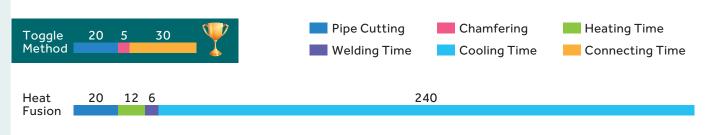








## Installation Time with Toggle Method vs Heat Fusion (sec.)



### Why Toglit + MECHFit?



Simple and easy to install



Minimal tools required

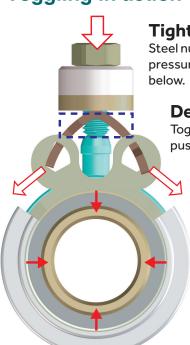


**Enhance workability** and productivity



Save time, cost and labour

### **Toggling in action**



#### Tighten

Steel nut tightens, exerting pressure on the toggle plate

#### **Deform**

Toggle plate deforms and pushes toggle rings outwards.

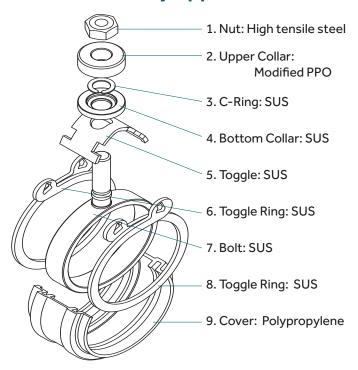
#### Compress

Toggle rings compress to create a uniform grip around the pipe.

#### Secure

Squeezing force creates a watertight seal around the pipe.

#### **Crafted for easy application**



## **Exceptional features**

#### • Quick & easy Installation

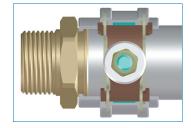
No special tools needed — just a common wrench!

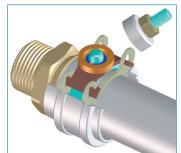
#### · Seamless installation in tight spaces

Made possible by the toggle mechanism, an innovative technique used to overcome large resistances with a small driving force.

#### Versatile application

Optimised for installation from any angle, including vertical pipe routing and frontal connections.





#### • Uniform squeezing force

The toggle rings distribute an even force around the pipe, preventing interior surface deformation between pipe and fitting.

#### Clear completion indication

Bolt and nut automatically detach after work completion.

#### Flawless finish

Pipe remains compact and smooth with minimal bulging after installation.

## The ultimate pipe fitting solution

## A perfect FIT

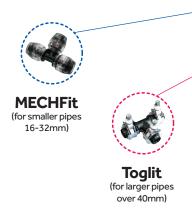
When used together, MECHfit and Toglit form the perfect pipe fitting solution for a robust, leak-free and durable chilled water supply and return system.

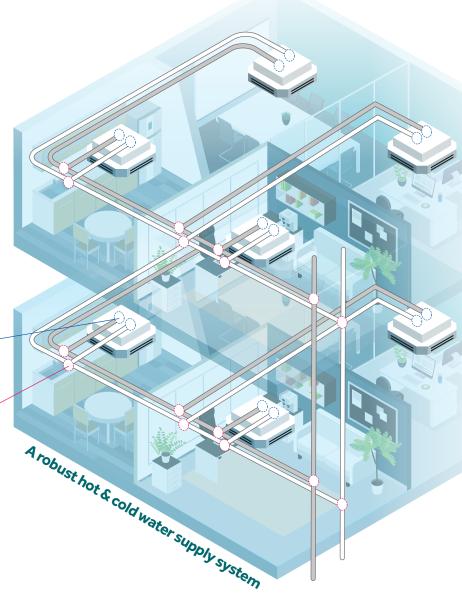
#### Toglit (for pipes >40mm)

Use it to connect larger chilled water supply and return pipes that run horizontally across the system.

#### MECHFit (for 16 to 32mm pipes)

Perfect for smaller branch pipes that connect to fan-coil unit.







## Toglit

#### **PRODUCT LINE UP**



Elbow TP90L40



**Equal Tees** TPTEE40



**Equal Union** TPSOC40

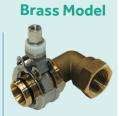


Fig. 373 Fixed Fitting with Male Thread 40x 1' TGOAG4010

TGOAG4012 40x 1'-1/4"



Tee with Female Thread end Terminal Elbow TGMNT4010 TGMNT4012 40x 1'-1/4"



TGMAL4010

## World-leading pipes for a complete water supply system

Complete your plumbing experience with our world-class PEX and PEX/AL/PEX pipes! Designed to meet stringent ISO15875 and ISO21003 standards, these pipes integrate seamlessly with our MECHFit and Toglit pipe fitting solutions to give you a superior and long-lasting water supply system.



#### **Features:**

- Coiled, lightweight and flexible for enhanced workability
- Corrosion, chlorine, electric and pipe-creep resistant
- Wide temperature and pressure range coverage
- Non-toxic and safe for potable water

#### Pipe dimensional standard

Size	O.D.	I.D.	Thickness	Length (m)
D16	16.0	12.0	2.0	200
D20	20.0	16.0	2.0	100
D25	25.0	20.0	2.5	50
D32	32.0	26.0	3.0	50
D40*	40.0	33.0	3.5	5

<sup>\*</sup> Use with Toglit fitting

<b>Technical Properties of Pipes</b>		16X2	20X2	25 X 2.5	32X3
reclinical Properties of Pipes		PEX-AL-PEX	PEX-AL-PEX	PEX-AL-PEX	PEX-AL-PEX
Outside pipe diameter	mm	16	20	25	32
Thickness of pipe	mm	2	2	2.5	3
Weight of 1m pipe	kg/m	0.099	0.127	0.206	0.323
Internal volume of 1m pipe	l/m	0.113	0.201	0.314	0.531
Heat conduction coefficient	Watt/m*K	0.43	0.43	0.43	0.43
Coefficient of linear expansion	mm/m*K	0.024	0.024	0.024	0.024
Roughness of internal surface	μm	1.5	1.5	1.5	1.5
Maximum punctual temperature	°C	110	110	110	110
Maximum operating temperature	°C	95	95	95	95
Minimum temperature of tube manipulation	°C	-40	-40	-40	-40
Minimum bending radius of internal spring	mm	80	100	125	160
Minimum bending radius with bending tool	mm	No kink	No kink	No kink	No kink
Gel content	%	>60	>60	>60	>60

<sup>\*</sup> Based on pipe manufacturer's specifications



## MECHE PRODUCT LINE UP

#### **Plastic Model**





#### 32× 25× 32 **Equal and Reducing Union**

32× 20× 32

32× 25× 25

14

12

10

3220

3225

3223



#### **Fixed Fitting with Male**







Fixed	Fitting	with	Female
Threa	d		

Code No. MPMAD		
1604	16× 1/2	120
2004	20× 1/2	120
2506	25 2/4	76

#### Brass Model (●) / DZR Model (●)



2004	20×	3/4 • •	68
Termi Elbow	I		

No. MF	MAL	/ MDN	ЛAL
1 1	16× 1/	2	114
2	20× 1/	2	102
2	20× 3/	/4 <b>• •</b>	68
2	25× 1/	/2 •	48
2	25× 3/	4	48
2	25× 1	• •	60
3	32× 1/	/2 • •	30
1 3	$32\times$ 1	• •	28
		16× 1/ 20× 1/ 20× 3/ 25× 1/ 25× 3/ 25× 1 32× 1/	20× 1/2

#### Copper Adapter Long

Code I	No.	MF	CAL			
16	- 1	16	× CL	J15•	- 1	40
Term with Threa	Ma		Ibo	w		

Code N	0.	MFO	AL /	MDO	AL
1604	-	16×	1/2		108
2004	-	20×	1/2	• •	84
2006		20×	3/4	• •	84
2506	1	25×	3/4	•	40
MDOA	L				
3204	1	32×	1/2	•	28

#### Terminal Elbow with Male Thread (Long) Code No. MFOLL

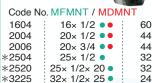
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Code No. M	DTE	E	-	
0000 ' 0	0 0	0	_	4.0

Reducir Tees	ng Carlo	
Code No.	MDTEE	
3232	32× 32× 25 •	12
2525	25× 25× 20 •	30

#### **Fixed Fitting** with Female Thread Code No. MFMAD / MDMAD

Tee wi	th _	
3210	32× 1 • •	30
2510	25× 1 ••	70
2506	25× 3/4	76
2504	25× 1/2 •	96
2006	20× 3/4 • •	120
2004	20× 1/2	120
1604	16× 1/2	120

Tee with
Female
Thread



32× 1/2 •

20

30

#### **Fixed Fitting** with Male

\*3204

IIIICa	iu	-		•
Code N	No. MFO	AG / M	DOAG	
1604	16>	1/2		192
2004	20×	1/2		112
2006	20>	3/4		112
2506	25×	3/4	- 1	48
2510	25	× 1 • •	- 1	48
3210	32	× 1 • •	- 1	30

#### MFOAD (Taper Thread type)

<sub>k</sub> 2006		20× R3/4	112
⟨2506		25× R3/4	48
⟨2510		25× R1	48
<sub>k</sub> 3210	1	32× R1	30
MDOAG	à		
3204		32× 1/2	30

3212 32× 1-1/4 Equal and Reducing

Union			
Code No.N	IDSOC		
3216	32× 16 •	i	30
MFSOC			
3220	32× 20		30
Stop End Code No. N			D

			Elec-	
Stop				ì
ode	No. I	MDSTE		7
6		16 •		192
0:	- 1	20 •	- 1	192

#### **Hub Header**

32



Code No. MPHHD				
New	Branch Size	pcs/BOX		
2211	20-20-16-16	12		
2111	20-16-16-16	12		
211	20-16-16	15		
2222	20-20-20-20	12		

#### **Terminal Header**



Code No. MPTHD					
New	Branch Size	pcs/BOX			
221	20-20-16	15			
211	20-16-16	18			
21	20-16	24			
12	16-20	24			
112	16-16-20	18			
1110	16-16-16-2	n 12			

Calibrator					
		. 1			
Code I			V		
16	1	16× 20× 25	1	40	

No.			
1	16× 20× 25		40
1	32× 32× 32		10



Box E	3ase			
<i>[</i> -]				[3
Code I	No. N	<b>IFBBC</b>		
*001	1	001	- 1	150
*080		080		100
*150		150		90
*200		200		NA

rest Plug	
Code No. MFTPG	
16	16
20	20
25	25
32	32

2



54

Item code: MP...is Plastic body / MF...is Brass body / MD...is DZR body

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**Daikin Holdings Singapore**