



**REHAU**<sup>®</sup>

Unlimited Polymer Solutions



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## **RAUTITAN PEX PLUMBING SYSTEM**

Secure. Easier. Faster.

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**100%**  
leak-proof  
joint

## FLEXIBLE CROSS-LINKED POLYETHYLENE (PEX) SYSTEM WITH UNIQUE REHAU COMPRESSION SLEEVE JOINTING TECHNOLOGY

For hot and cold water applications.

**SECURE**  
Simple. Robust. Reliable.



### RAUTITAN PIPES

RAUTITAN pipes are made from high density cross-linked polyethylene (PE-Xa). The cross linking process causes the individual polyethylene molecules to bond in a three-dimensional network creating a tough and durable pipe with superior:

- long-term stability
- high temperature resistance and
- high pressure resistance
- superior flexibility and strength.

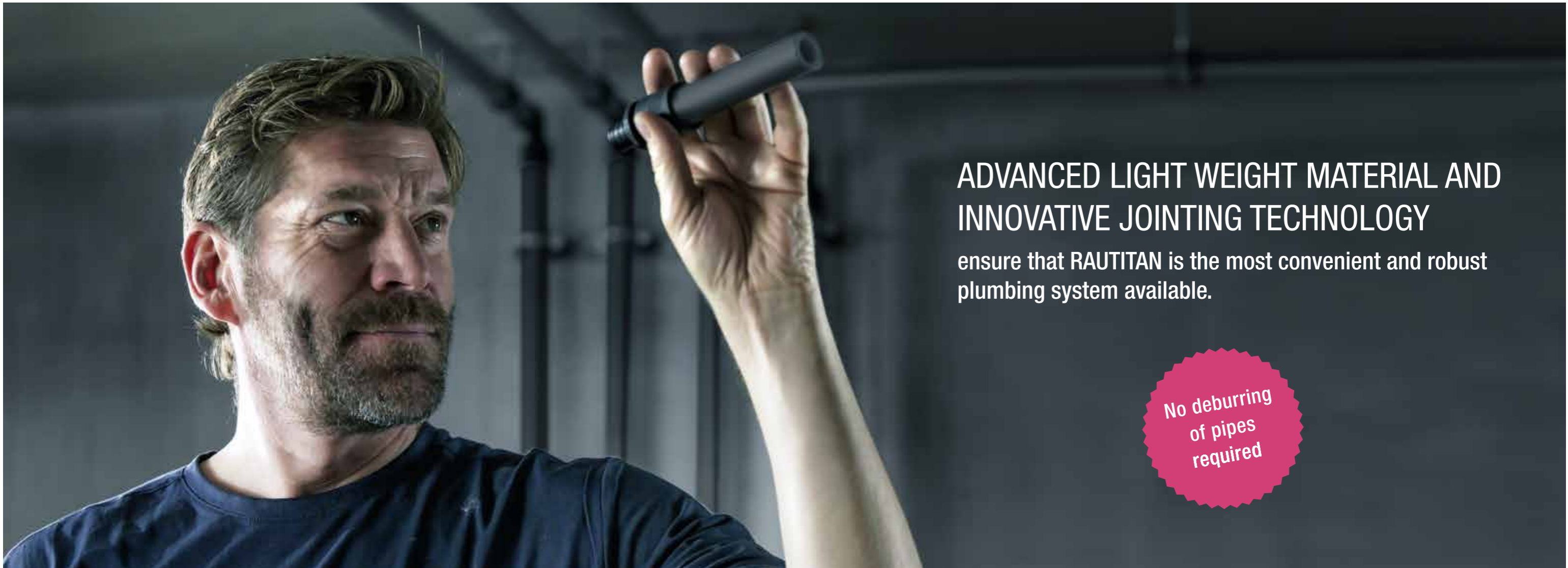
The external black PE-sheath blocks more than 99.9% of light transmission through the pipes to prevent the growth of algae within the plumbing system to maintain the system's hygiene.



The RAUTITAN system includes a single PN20 pipe system for both hot and cold water, which has been exposed in long-term tests at extreme temperature and pressure conditions to confirm its lifespan of over 50 years even for hot water application.

**100% permanent leak-proof**  
Additional O-rings or other sealants, which can be weak points over the long-term, are not needed because the pipe itself functions as a sealant.

**Pressure test up to 150 psi**  
The RAUTITAN compression sleeve joint is a simple, robust and reliable connection.



## ADVANCED LIGHT WEIGHT MATERIAL AND INNOVATIVE JOINTING TECHNOLOGY

ensure that RAUTITAN is the most convenient and robust plumbing system available.

No deburring of pipes required

## EASIER

Engineered for your convenience



### RAUTITAN SYSTEM PROVIDES

- Simple, fast and robust jointing technique
- Up to 100m coiled pipe runs. No joint!
- More than 30% less joints per installation
- No waiting for cool down periods before pressurizing the system

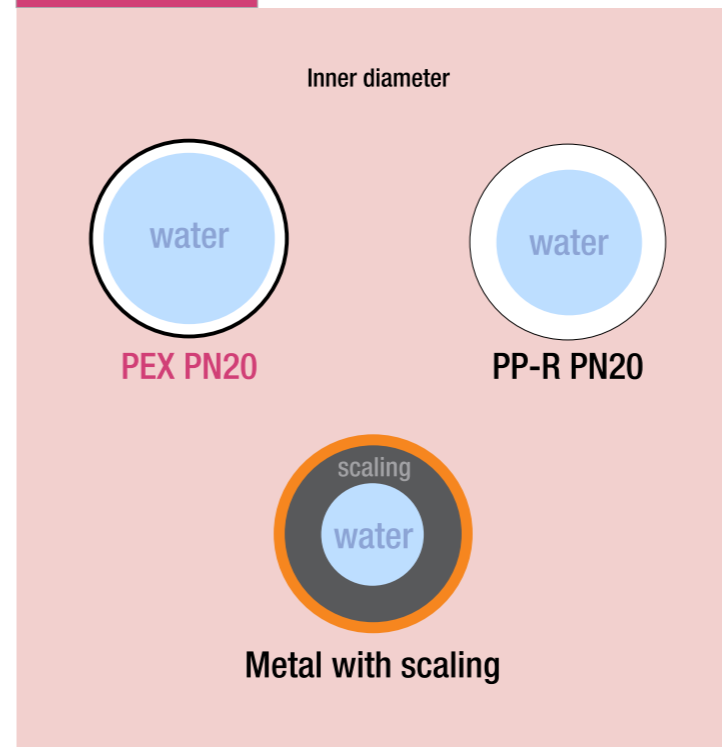
#### One pipe for hot and cold

The RAUTITAN system includes a single PN20 pipe for both hot and cold water applications.

#### No welding, no brazing!

RAUTITAN's robust 'cold' compression sleeve jointing technology requires no brazing, no welding, no open flames or hot welding tools.

### No scaling!



Due to corrosion and scaling resistant properties, the RAUTITAN system provides the highest standard of hygiene and hydraulic performance, today and in the future.

#### Reduce workmanship fault

RAUTITAN system can be installed in one single pipe run; no connections; 100% system security!

#### 20% less wastage

RAUTITAN pipes can be cut exactly to the length of the required pipe run.

Sealed  
without  
O-ring

OFFERING ALL THE CONDITIONS  
for hygienic drinking water distribution

**FASTER**  
Save time, save cost



**RAUTITAN PX fittings**

For sizes 16mm to 40mm, non-threaded RAUTITAN fittings, PPSU (polyphenyl sulphone) and compression sleeves, PVDF (polyvinylidene fluoride).

**RAUTITAN MX fittings**

For sizes 50mm to 63mm high quality Dezincification resistant brass fittings

**>30% lesser joints**

RAUTITAN PE-Xa pipes give you the freedom to bend around corners and around existing services to complete the installation.

**Up to 50% less labour**

RAUTITAN's light weight materials and simple jointing process ensure it is a one man job.



**Install a valve with no threaded connection**

RAUTITAN valves are featured with unique REHAU compression sleeve connection joints that can create a permanent seal to our RAUTITAN PEX pipes.



**100% seamless connection**

Unique PEX/PPR adaptors to avoid using threaded connection between the two systems.



## RAUTOOL - THE MODULAR TOOL FOR EVERY REQUIREMENT

**RAUTOOL**  
completes  
RAUTITAN

### TOOLS AND ACCESSORIES

Universal and professional

#### TWO EASY STEPS TO SECURITY

Making a 100% leak-proof joint has never been this easy. Utilized for over 30 years and across millions of connections REHAU guarantees a 100% permanent leak-proof joint in just two simple steps!



Only RAUTOOL assembly tools guarantee easy installation and fully leak-proof connections. Its compact construction simplifies handling and also makes it possible to install in the toughest construction sites. Available in a multitude of modular options, the RAUTOOL program can be tailored to the individual needs of each and every installer.

Simple mechanical design and robust materials ensure long-lasting performance, minimal tool maintenance and regular calibration.



RAUTOOL H2 16 - 40mm



RAUTOOL M1 16 - 40mm



RAUTOOL HG1 40 - 63mm



## SPECIFICATION

Material:	-	PE-Xa
Colour (surface)	-	Black
Notch impact strength at 20°C	-	No fracture
Notch impact strength at -20°C	-	No fracture
Average coefficient of expansion		0.15
When laying with pipe support channel:	mm/(mK)	
- Size 16 - 40		0.04
- Size 50 - 63		0.1
Thermal conductivity	W/(mK)	0.35
Pipe roughness	[mm]	0.007
Operating pressure (maximum at 70°C)	[bar]	10
Operating temperature		
- Maximum	[°C]	90
- Minimum		-
Short-term maximum temperature (malfunction)	[°C]	100
Material constant C	-	12
Minimum bending radius without tools		8 x d
d = pipe diameter		
Minimum bending radius with pipe bend brackets		3 – 4 x d
d = pipe diameter		
Available sizes	[mm]	16 – 63

## STANDARD AND CERTIFICATION

### BS 6920

Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of water

### BS 7291

Thermoplastics pipes and associated fittings for hot and cold water for domestic purposes and heating installations in buildings

### BS EN 1982

Copper and copper alloys. Ingots and castings

### BS EN 12163

Copper and copper alloys. Rod for general purposes

### BS EN 12165

Copper and copper alloys - Wrought and unwrought forging stock

### BS EN 12420

Copper and copper alloys. Forgings

### DIN 1988

Codes of practice for drinking water installations (TRWI)

### DIN 4102

Fire behaviour of building materials and components

### DIN EN 13501

Fire classification of construction products and building elements

### DIN EN 12164

Copper and copper alloys - Rod for free machining purposes

### DIN EN 12168

Copper and copper alloys - Hollow rod for free machining purposes

### DVGW W 291

Cleaning and disinfection of water distribution systems

### DVGW W 534

Pipe connectors and connections in the drinking water installation

### DVGW W 551

Drinking water heating and drinking water pipe systems

### ISO 14001

Environment Management System (EMS) standard

### ISO 7

Pipe threads where pressure-tight joints are not made on the threads

### ISO 9001

Quality Management Systems

### ISO 15875

Plastic piping systems for hot and cold water installations - crosslinked polyethylene (PE-X)

### SS 375

Suitability of nonmetallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water

### ISO 50001

Energy Management Systems

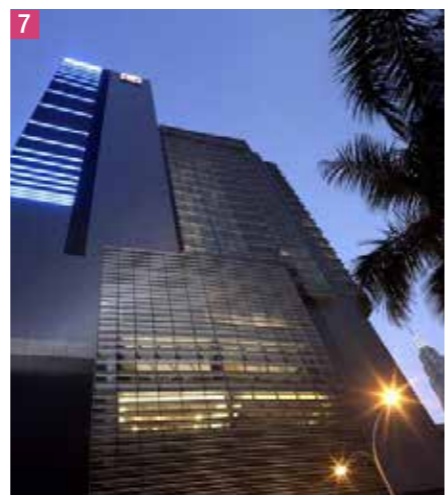
## QUALITY AND CERTIFICATION

RAUTITAN meets international quality and regulatory standards, and is accredited by both international and national regulation bodies:



# RAUTITAN WATER SERVICES PROJECT REFERENCES

Proven for more than 40 years



1 Australia, Federation Square  
2 Austria, Power Tower  
3 Bulgaria, Primoretz Grand Hotel and Spa

4 Hong Kong, Bel-Air 8  
5 Hungary, Ramada Resort Aquaworld  
6 Indonesia, JW Marriott Hotel

7 Malaysia, Traders Hotel

8 Netherlands, The Red Apple Apartment  
9 Philippines, Discovery Primea  
10 Russia, Moscow School of Management

11 Slovakia, Wellness Aquamarine  
12 Singapore, W Hotel  
13 South Africa, Radisson Blue Hotel

14 Ukraine, Hotel Park Inn by Radisson

# RAUTITAN WATER SERVICES

## Product range

### RAUTITAN pipes

Description	Art. - No.	DN in mm
Pipe (Available in coil or straight length)	139140-005	16 x 2.2 x 5M Lg
	139140-100	16 x 2.2 x 100M coil
	139150-005	20 x 2.8 x 5M Lg
	139150-100	20 x 2.8 x 100M coil
	139160-005	25 x 3.5 x 5M Lg
	139160-050	25 x 3.5 x 50M coil
	139170-005	32 x 4.4 x 5M Lg
	139170-050	32 x 4.4 x 50M coil
	136521-005	40 x 5.5 x 5M Lg
	136531-005	50 x 6.9 x 5M Lg
136541-005	63 x 8.6 x 5M Lg	

### RAUTITAN components

Description	Art. - No.	DN in mm
T-piece, Reduced Centre (MX)  (PX)	160061-001	20 - 16 - 20 PX
	160062-001	25 - 16 - 25 PX
	160063-001	25 - 20 - 25 PX
	160064-001	32 - 16 - 32 PX
	160065-001	32 - 20 - 32 PX
	160066-001	32 - 25 - 32 PX
	160067-001	40 - 20 - 40 PX
	160068-001	40 - 25 - 40 PX
	160069-001	40 - 32 - 40 PX
	230348-001	50 - 20 - 50 MX
	230358-001	50 - 25 - 50 MX
	139792-001	50 - 32 - 50 MX
	137089-001	50 - 40 - 50 MX
	230328-001	63 - 20 - 63 MX
	230338-001	63 - 25 - 63 MX
	137175-001	63 - 32 - 63 MX
	137074-001	63 - 40 - 63 MX
	137084-001	63 - 50 - 63 MX

T-piece, Reduced End (PX)	160071-001	20 - 20 - 16 PX
	160072-001	25 - 25 - 16 PX
	160073-001	25 - 25 - 20 PX
	160074-001	32 - 32 - 20 PX
	160075-001	32 - 32 - 25 PX

### RAUTITAN components

Description	Art. - No.	DN in mm
T-piece, Wall Mounted	138841-402	16 - Rp 1/2 - 16 MX
	138851-402	20 - Rp 1/2 - 20 MX
T-piece, Uniform (MX)  (PX)	160031-001	16 PX
	160032-001	20 PX
	160033-001	25 PX
	160034-001	32 PX
	160035-001	40 PX
	137155-001	50 MX
	137165-001	63 MX

T-piece, Reduced Centre and End (PX)	160081-001	20 - 16 - 16 PX
	160082-001	25 - 16 - 16 PX
	160085-001	25 - 20 - 20 PX
	160086-001	32 - 20 - 20 PX
	160091-001	32 - 25 - 25 PX
	160092-001	40 - 32 - 32 PX

T-piece, Unequal Centre and End (MX)  (PX)	160103-001	20 - 25 - 16 PX
	160083-001	25 - 16 - 20 PX
	160084-001	25 - 20 - 16 PX
	160087-001	32 - 20 - 25 PX
	160089-001	32 - 25 - 20 PX
	137195-001*	50 - 32 - 40 MX
	137205-001*	63 - 32 - 50 MX

T-piece, Unequal Centre (PX)	160101-001	16 - 20 - 16 PX
	160102-001	16 - 25 - 16 PX
	160104-001	20 - 25 - 20 PX
	160106-001	25 - 32 - 25 PX

T-piece, Outlet with female thread	258206-002*	25 - Rp 3/4 - 25 MX
	138991-002*	32 - Rp 3/4 - 32 MX
	138981-002*	32 - Rp 1 - 32 MX

### RAUTITAN components

Description	Art. - No.	DN in mm
Compression Sleeve Required for every compression joint (MX)  (PX)	160001-001	16 PX
	160002-001	20 PX
	160003-001	25 PX
	160004-001	32 PX
	160005-001	40 PX
	139771-002	50 MX
	139781-002	63 MX

Straight Coupling (MX)  (PX)	160011-001	16 PX
	160012-001	20 PX
	160013-001	25 PX
	160014-001	32 PX
	160015-001	40 PX
	139741-002	50 MX
	139751-002	63 MX

Reducing Coupling (MX)  (PX)	160041-001	20 - 16 PX
	160042-001	25 - 16 PX
	160043-001	25 - 20 PX
	160044-001	32 - 25 PX
	138018-001	40 - 25 MX
	160047-001	40 - 32 PX
	137863-001	50 - 32 MX
	137843-001	50 - 40 MX
138019-001	63 - 40 MX	
137853-001	63 - 50 MX	

Elbow 90° (MX)  (PX)	160021-001	16 PX
	160022-001	20 PX
	160023-001	25 PX
	160024-001	32 PX
	160025-001	40 PX
	139882-001	50 MX
	137873-001	63 MX

Elbow 45° (MX)  (PX)	160052-001	20 PX
	160053-001	25 PX
	160054-001	32 PX
	160055-001	40 PX
	137094-001	50 MX
	137104-001	63 MX

### RAUTITAN components

Elbow Adaptor - male thread	139491-002	16 - R 1/2 MX
	139501-002	20 - R 1/2 MX
	139511-001	25 - R 3/4 MX
	137423-001*	32 - R 3/4 MX
	137433-001	32 - R 1 MX

Elbow Adaptor - female thread	137295-001	16 - Rp 1/2 MX
	137124-001	16 - Rp 3/4 MX
	137305-001	20 - Rp 1/2 MX
	137134-001	20 - Rp 3/4 MX

Short Wall-mounted Elbow - female thread	138461-405	16 - Rp 1/2 MX
	138471-405	20 - Rp 1/2 MX
	139191-405	20 - Rp 3/4 MX
	138591-405	25 - Rp 3/4 MX

Long Wall-mounted Elbow - female thread	138441-405	16 - Rp 1/2 MX
	138451-405	20 - Rp 1/2 MX

BP Elbow - male thread	138491-405*	20 - R 1/2 MX
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BP Elbow - female thread with rectangular wall plate	137083-401	16 - Rp 1/2 MX
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### RAUTITAN components

Straight Connector, female thread	259515-002	16 - Rp 1/2 MX
	259525-002	20 - Rp 1/2 MX
	138253-001	20 - Rp 3/4 MX
	139281-002	25 - Rp 1/2 MX
	259535-002	25 - Rp 3/4 MX
	139101-002	32 - Rp 3/4 MX
	139091-002	32 - Rp 1 MX

Straight Connector, male thread	137955-001	16 - R 1/2 MX
	137965-001	16 - R 3/4 MX
	137985-001	20 - R 3/4 MX
	137995-001	20 - R 1 MX
	139181-002	25 - R 1/2 MX
	259505-002	25 - R 3/4 MX
	257336-002	25 - R 1 MX
	139081-002	32 - R 3/4 MX
	139051-002	32 - R 1 MX
	139691-002	40 - R 1-1/4 MX
	139711-002	50 - R 1-1/2 MX
	139721-002	63 - R 2 MX

Straight Tap Connector with gasket	139551-002	16 - G 1/2 MX
	139561-002	20 - G 1/2 MX
	139571-002	20 - G 3/4 MX
	139912-001	25 - G 3/4 MX
	139932-001	32 - G 1 MX
137164-001*	40 - G 2 MX	

Clip-on Support Channel 3m/length	138033-001	16
	138043-001	20
	138053-001	25
	138063-001	32
	138073-001	40
	138083-001	50
	138093-001	63

### RAUTITAN components

Profile Bent Bracket 90° x 3D - with spring	138881-002	16
	138891-002	20
	138351-002	25
	138641-002	32
	261153-001	32 (5D)

Profile Bent Bracket 45° x 3D - with spring	139121-002	16
	139131-002	20
	138911-002	25
	138921-002	32

Profile Bent Bracket 90° x 5D - no spring	258408-002	16
	258798-002	20
	257249-002	25

Profile Bent Bracket 45° x 5D - no spring	265729-001	16
	268624-001	20
	268634-001	25

Stopper	137793-001	16 MX
	137436-001	20 MX

REHAU Ball Valve	215227-001	16
	215228-001	20
	215229-001	25

RAUTITAN Gate Valve	208896-001	16
	215583-001	20
	215585-001	25
	215586-001	32
	215587-001	40

\*Selling off

PX: Material: PPSU, Color: Black

MX: Material: DZR Brass, Color: Natural Brass



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SEA006 BT 11.2016