

Service Intended

Suitable for hot, aggressive gaseous and liquid media under extreme conditions. Diaphragm gauges are suitable for viscous, crystallising or polluting media. Typical applications will be in the petrochemical and chemical process industry.

Case Details

Nominal Dia: 100 & 160mm
 Material: Stainless steel 304.

Bezel

Type T: S/Steel bayonet lock, twist type - removable
 Type R: S/Steel rolled ring - tamper proof
 Material: Stainless steel 304

Pressure Connections

Flanged: To required flange specifications.
 Material: Stainless steel 316, other special materials to required specifications.
 Sizes : DN 25 to DN 125 in Class 10 to 250 to required specifications.
 Position: Radial bottom connection only.
 Range : 60 kPa to 25 MPa
 Gaskets: PTFE when bolted.

Measuring System

Diaphragm / bourdon tube filled system.

Diaphragm

Material: Stainless steel 316 welded to upper housing, other special / exotic materials on request.

Geared Movement

Material: Clockwork brass or stainless steel.

Pointer

Collet: Aluminium or brass
 Blade: Black aluminium

Dial

Material: Aluminium, white with black lettering.

Window

Instrument glass or plexiglass. (*Plexiglass recommended for food applications*)

Weather Protection

IP 65 Dust & weather proof.

Working Pressure

Steady: Full scale value
 Fluctuating: 90% of full scale value
 Short Period: 130% of full scale value

Accuracy Class

Class 1

Operating Temperature

Ambient: -20°C to + 60°C
 Medium: + 100 °C
 Error: 0,5% of fsd / 10°C above or below 20°C

Optional Extras

Glycerine filling of case
 Calibration Certificate
 Customized scale plates (*customer logo, red line, etc*)
 Special Dials, other than standard (*dual scale, bar, psi*)
 Colour Coding of dial
 Drag pointer (*maximum set pointer*)
 Micro adjustable pointer
 Single or double electrical contacts
 Cooling tower
 Capillary Extensions



BOLTED DIAPHRAGM



WELDED DIAPHRAGM



PRESSURE MEASUREMENT
Industrial Use - General Purpose
Type R3: Stainless steel case with brass internals
Type R4: Stainless steel case with stainless steel internals

Data Sheet P RR3-4

Service Intended

Suitable for media such as air, water, oil & gases that do not attack copper alloy or stainless steel parts or will obstruct the pressure system. Typical applications will be in the hydraulic, pneumatic, refrigeration, steam, chemical and food and beverage industry.

Case Details

Nominal Dia: 40, 50, 63, 80, 100, 160mm
Material: Stainless steel 304

Bezel

S/Steel rolled ring type - tamper proof.
Material: Stainless steel 304

Pressure Connections

Material: Type 3: Brass. Type 4: Stainless steel 316
Sizes: 50, 63, 80, mm dia: 1/8" & 1/4" in BSP or NPT
Sizes: 100, 160mm dia: 1/4", 3/8" & 1/2" in BSP or NPT
(Position: See "Mounting Configurations".)

Mounting Flange

Material: Polished stainless steel 304

Pressure Element

Material: Type 3: Cu-alloy Type 4: Stainless steel 316

Geared Movement

Material: Clockwork brass or stainless steel.

Pointer

Collet: Aluminium or brass Blade: Black aluminium

Dial

Material: Aluminium, white with black lettering.

Window

Instrument glass or plexiglass (*plexiglass recommended for food applications*)

Weather Protection

IP 65 Dust & weather proof.

Working Pressure

Steady: Full scale value
Fluctuating: 90% of full scale value
Short Period: 130% of full scale value
For pulsating pressure, the use of an inlet restrictor and/or liquid filling is recommended.

Accuracy Class

40mm dia: 2.5
50mm, 63mm & 80mm dia: Class 1.6
100mm, 160mm dia: Class 1

Operating Temperature

Ambient: -20 °C to + 60 °C
Medium: +70 °C (*soldered tube*); + 100 °C (*brazed / tig welded tube*) *For live steam use, a syphon tube is recommended.*

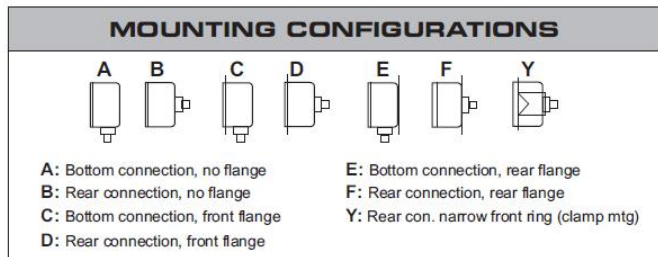
Optional Extras

- Calibration Certificate
- Customized scale plates (*customer logo, red line, etc*)
- Special Dials, other than standard (*dual scale, bar, psi*)
- Damped movement (*Vibragauge*)
- Colour Coding of dial
- Drag pointer (*maximum set pointer*)
- Micro adjustable pointer
- Blow out disc
- Diaphragm seals fitted



Type R
Roll Ring Bezel

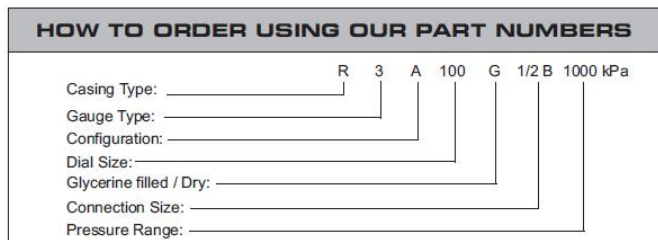
For dimensional drawing see technical section



STANDARD PRESSURE RANGES

Ranges	Figure Interval	Minor Graduations	Ranges	Figure Interval	Minor Graduations
Pressure			Pressure		
0/2.5 kPa	0.5	0.05	0/6 MPa	1	0.1
0/4 kPa	1	0.1	0/10 MPa	2	0.2
0/6 kPa	1	0.1	0/16 MPa	2	0.2
0/10 kPa	2	0.2	0/25 MPa	5	0.5
0/16 kPa	2	0.2	0/40 MPa	10	1
0/25 kPa	5	0.5	0/60 MPa	10	1
0/40 kPa	10	1	0/100 MPa	20	2
0/60 kPa	10	1			
0/100 kPa	20	2	Vacuum		
0/160 kPa	20	2	-100/0 kPa	20	2
0/250 kPa	50	5	Compound		
0/400 kPa	100	10	-100/0/150 kPa	50	5
0/600 kPa	100	10	-100/0/300 kPa	100	10
0/800 kPa	100	10	-100/0/500 kPa	100	10
0/1000 kPa	200	20	-100/0/700 kPa	100	10
0/1600 kPa	200	20	-100/0/900 kPa	200	20
0/2500 kPa	500	50	-100/0/1500 kPa	500	50
0/4000 kPa	1000	100	-100/0/2400 kPa	500	50

Customized and other scales such as bar / psi / inHG etc. are available on request





PRESSURE MEASUREMENT	
Pressure Testing Kits	
TKS Series	TKM Series
TKL Series	TKQ Series

Data Sheet P TKS3



TKS



TKM



TKL



TKQ

S A Gauge manufactures easy to handle, robust testing kits designed for troubleshooting on hydraulic, air and vacuum systems. Sizes and configurations other than indicated below are also available on request.

	TKS	TKM	TKL	TKQ
Steel carry case (with storage space for hoses & fittings underneath hinged mounting plate)	Lightweight steel carry case, powder coated. Size 265mm long x 210mm wide x 105mm high.	Lightweight steel carry case, powder coated. Size 330mm long x 240mm wide x 105mm high.	Lightweight steel carry case, powder coated. Size 360mm long x 360mm wide x 170mm high.	Heavy duty stainless steel 304 case with rubber cover. Case dia: 160mm
Pressure gauge quantity and size per kit (glycerine filled)	2, 3, 4, 5, or 6 x 63mm dia 2, 3, or 4 x 80mm dia 1 or 2 x 100mm dia 1 x 160mm dia (other combinations and configurations on request)	2, 3, 4, 5, 6 or 8 x 63mm dia 2, 3, 4 or 6 x 80mm dia 1, 2, 3 or 4 x 100mm dia 1 x 160mm dia (other combinations and configurations on request)	8 or 10 or 13 x 63mm dia 9 x 80mm dia 6 x 100mm dia 1 x 160mm dia (other combinations and configurations on request)	3 x 50mm dia. Glycerine filled
Pressure ranges	Standard pressure ranges vacuum : 0...60 / 100 kPa compound : -100...0...+150 / 300 / 500 / 700 / 900 / 1500 / 2400 kPa pressure : 0...60 / 100 / 160 / 250 / 400 / 600 / 800 / 1000 / 1600 / 2500 / 4000 / 6000 kPa 0...6 / 10 / 16 / 25 / 40 / 60 MPa Optional scales Other units of pressure or vacuum such as psi and inHG etc. Dual scales, such as MPa / psi, or bar / psi.			1 x - 30 inHG ...0...+150 psi 1 x 0...600 psi 1 x 0...6000 psi other units of measure available on request
Test hose	Hose not included with kit (available as optional extra because of variable length requirements) Available in: 1m, 2m, 3m, 4m lengths (standard with M16 x 2 female swivel nuts both ends)			1m test hose included
Test connectors	Kits standard with: M16 x 2 male connector mounted on panel. (other thread sizes on request)			M16 x 2 female swivel
Optional extras	Test hose to your requirements Test connectors to customer requirements			Test connectors to customer requirements.

PLASTIC INDUSTRIAL HOSE

Garden Hose

A tough hose suitable for watering gardens, as well as industrial and agricultural applications. It is UV stabilized, cut and abrasion resistant, and highly flexible.



SIZE: 12mm, 20mm and 25mm

Length: 30 metres up to 200 metres

Range: HC 600, HC 800 and HC 1000

Clear PVC Hose

Ideal for conveying liquids and gases in low pressure applications such as laboratories and aquariums. This has good corrosion and chemical resistance.



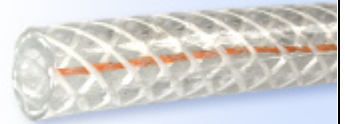
SIZE: 3mm up to 50mm

Length: 30 metres

Range: 6001 (Thin wall)
6002 (Thick wall)

Clear Reinforced PVC Hose

Used in a wide range of air, oil and chemical applications where a high pressure is needed. Please note - chemical resistance can be advised on request.



SIZE: 3mm up to 50mm

Length: 30 metres

W.P : 700 - 1700 Kpa

Blue PVC Fuel Line Hose

A nylon reinforced high pressure hose with a good resistance to fuel, diesel and LP gas. Cut and abrasion resistant. Available in opaque blue and in orange.



SIZE: 3mm up to 12mm

Length: 30 metres

W.P : 1100 - 1700 Kpa
Range: 7019 and 7029

Black / Blue / Red PVC Airhose

High pressure lightweight hose with a good resistance to oil and chemicals, used on air tools and coolant lines to convey air and water.



SIZE: 6mm up to 12mm

Length: 30 metres

W.P.: 1700 - 1900 Kpa

Fire Reel Hose

Standard PVC hose found on all fire reels and extinguishers. Highly flexible with a 10 year design life. Approved by all provincial administrations and municipalities.



SIZE : 12mm & 20mm

Length: 30 metres

W.P.: 1200 Kpa
SPEC: SABS 1086

Orange PVC mining Hose

Standard duty flexible mining hose with a high burst pressure. Used on compressors, jack hammers and pneumatic tools.



SIZE: 10mm up to 50mm

Length: 30 metres

W.P.: 880 - 1700 Kpa
SPEC: SABS 1086

Blue PVC mining Hose

Medium duty high pressure hose with a cut and abrasion resistant cover. This hose is oil resistant and non absorbent.



SIZE: 10mm up to 32mm

Length: 30 metres

W.P.: 880 - 1700 Kpa
SPEC: SABS 1086

Green PVC mining Hose

A heavy duty top of the range hose. This robust highly flexible hose is lighter than rubber and is used in a wide range of mining and engineering applications.



SIZE: 10mm up to 50mm

Length: up to 100 metres

W.P.: 1000 - 1700 Kpa
SPEC: SABS 1086

Red Rockdrill Hose

Ideal for heavy duty applications where a robust hose with an extremely high working and burst pressure is needed.



SIZE: 10mm up to 50mm

Length: up to 100 metres

W.P.: 1600 - 4200 Kpa
B.P.: 6400 - 1200 Kpa

Yellow Heliflex Hose

Medium duty UV stabilized suction and delivery hose. This smooth bore crush resistant hose is ideal for air and water applications where a vacuum / suction is used.



SIZE: 25mm up to 100mm

Length: 30 metres

W.P.: 310 - 550 Kpa

Green Heliflex Hose

Heavy duty, lighter than rubber and designed to be cut and abrasion resistant. It is used mainly in the irrigation, mining, fishing and diamond dredging industries.



SIZE: 25mm up to 250mm

Length: 30 metres

W.P.: 240 - 970 Kpa

Non Toxic Heliflex Hose

Transparent and specially formulated to handle the suction and delivery of food products. (Complies with the united States FDA specifications for non toxic hose.)



SIZE: 25mm up to 200mm

Length: 30 metres

W.P.: 240 - 970 Kpa

Metallic Grey Ducting Hose

Light duty ducting hose suitable for air conditioning, dust extraction and conveying chemical fumes.



SIZE: 25mm up to 150mm

Length: 30 metres

W.P.: 225 Kpa

Helisteel PVC Hose

Used in suction / delivery applications where a clear hose is needed. Helisteel is non toxic and can be used for food applications. It is also reinforced with a steel wire helix, this adds to the flexibility of the hose.



SIZE: 12mm up to 100mm

Length: 60 metres up to 32mm then 30 metre coils

W.T.: up to 60°C

Blue Layflat Hose

Used on all applications where a lightweight smooth bore hose is needed. It is totally flexible, durable and can be easily stored when not in use. Available in both 3 bar and 7 bar working pressures.



SIZE: 40mm up to 150mm

Length: 100 metres

W.P.: 350 Kpa & 700 Kpa

Flexiline

Blue high pressure layflat hose. Used in a wide range of water discharge applications where a hose is needed that is both easy to handle and store, but can still do the pressure.



SIZE: 40mm up to 200mm

SOLD IN 100 METRE COILS ONLY

W.T.: 500 up to 1500 Kpa

Aqualine

Black heavy duty high pressure layflat hose. Used in agricultural and industrial applications where a robust, abrasion resistant hose is needed that is both flexible and easy to store.



SIZE: 40mm up to 200mm

SOLD IN 100 METRE COILS ONLY

W.P.: 1200 up to 2800 Kpa

PVC Vacuum Hose

Light weight, crush resistant and highly flexible. Used in a broad range applications such as dust extraction, industrial and domestic vacuum cleaners and swimming pools.



SIZE: 19mm up to 102mm

Length: 20 metres

M.V.: 10% up to 70%

Wiremould Ducting Hose

Suitable for conveying hot or cold air at a high velocity. It is super flexible and can compress up to 50% of its original length. Ideal for air conditioning.



SIZE: 63.5mm up to 355.6mm

Length: 3 metres maximum

M.V.: 10% up to 70%

Cropspray Hose

Specifically designed for crop and stock spraying. It has high working and burst pressures and a good chemical resistance to acids, alkalies and inorganic solutions.



SIZE: 12mm, 20mm & 25mm

Length: 100 metres

W.P.: 4000 Kpa

LDPE Pipe

Used mainly in sprinklers and small to large irrigation systems. It is also commonly found around the pool. Available in both Class 3 and Class 6.



SIZE: 15mm up to 50mm

Length: 100 metres

W.P.: 300 - 600 Kpa

Dragline Hose

A strong robust hose used in the agricultural industry for all watering applications. It is UV stabilised cut and abrasion resistant, and highly flexible.



SIZE: 12mm, 20mm & 25mm

Length: 100 metres

B.P.: 3500 - 4000

RUBBER INDUSTRIAL HOSE

SIZE: 6mm up to 25mm

Roll Size: 60 metres

W.P.: 1200 Kpa
SPEC : SABS 988

Green Line Mining Hose

Medium duty air, water and underground mining applications. A well known brand in the market.



SIZE: 10mm up to 100mm

Roll Size: 30 metres

W.P.: 500 Kpa up to 1200 Kpa
SPEC : L.D. SABS 988

Gold Line Mining Hose

Outstanding for heavy duty mining and industrial application. This is the top of the range in mining hoses.



SIZE: 10mm up to 100mm

Roll Size: 30 metres

W.P.: 1000 Kpa up to 1700 Kpa
SPEC : H.D. SABS 988

Oil Resistant Mining Hose (Red Line)

Suitable for oil, air with oil vapours and oil lubrications pneumatic tools, even at high temperatures. Neoprene lined.



SIZE: 10mm up to 50mm

Roll Size: 30 metres

W.P.: 700 Kpa up to 1700 Kpa
SPEC : SABS 988

Industrial Airline Hose

Ideal for small air tools and pneumatic applications, where a strong flexible hose is needed. Available in red for Acetylene and in Blue for Oxygen.



SIZE: 6 mm, 8mm and 10mm

Roll Size: 100 metres

W.P.: 2000 Kpa

Water Suction and / or Delivery Hose

Hard wall, used in a wide range of mining, industrial and agricultural suction or delivery applications. Wire reinforced to prevent kinking.



SIZE: 10mm up to 100mm

Length: Up to 30 metres

W.P.: 500 Kpa or 1000 Kpa

Water Delivery Hose

Soft wall, an all purpose water discharge hose with a abrasion resisting cover.



SIZE: 32mm up to 350mm

Length: Up to 30 metres depending on size
Fitting / Flanges: Built in on request

W.P.: Client to specify

Ducting Hose

Super flexible for extracting fumes and dust in workshops, industrial plants and air conditioning systems. (Also available with an abrasive resistant liner.)



SIZE: 25mm up to 300mm

Length: Up to 18 metres

W.P.: 100 Kpa

Pulp and Slurry Hose

Ideal for conveying an abrasive medium. This hose has an abrasive resistant liner either 6mm, 9mm or 12mm, and is available in a hard or soft wall.



SIZE: 25mm up to 350mm

Length: Up to 30 metres depending on size
Fitting / Flanges: Built in on request

W.P.: Client to specify

Sand and Shotblast Hose

Hose for all types of sand and shot blasting applications where an extremely robust but flexible hose is required.



SIZE: 20mm up to 76mm

Length: 30 metres

W.P.: 1000 Kpa

Furnace Coolant Hose

Asbestos covered and non conductive. Used in the conveyance of coolant water in foundries, steel mills or where a hose is required to withstand high exterior temperature.



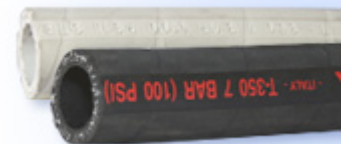
SIZE: 25mm up to 300mm

Length: Up to 30 metres depending on size

W.P.: 1000 Kpa

Low Pressure Steam Hose

Black textile reinforced hose suitable for the low pressure transfer of saturated steam or superheated steam. Also available in white non marking for useage in the food and pharmaceutical industries.



SIZE: 12mm up to 50mm

Length: 30 or 60 metres

W.P.: 700 Kpa

High Pressure Steam Hose

Wire reinforced extremely robust hose suitable for the high pressure transfer of saturated steam or superheated steam. Available in both a black or red cover.



SIZE: 12mm up to 50 m

Length: 30 or 60 metres

W.P.: 1700 Kpa

Beer and Milk Hose

White odourless and taste free liner, ideal for conveying beer, milk and fruit juices (Please note - this hose is not suitable for spirits).



SIZE: 25mm up to 100mm

Length: 30 metres

W.P.: 1000 Kpa

Wine Suction and Delivery Hose

A food grade lined hose, developed to be light weight and flexible in order to improve handling (Please note - this hose is not suitable for spirits).



SIZE: 25mm up to 100mm

Length: 30 metres

W.P.: 1000 Kpa

Softwall Food Grade Delivery Hose

Used for the discharge of products in both the food and pharmaceutical industries - where a light weight yet robust hose is needed (Please note - this hose is not suitable for spirits).



SIZE: 20mm up to 76mm

Length: 30 metres

W.P.: 1000 Kpa

Petroleum Suction and Delivery Hose

Nitrile lined hose, suitable for use in any petroleum based application where resistance to a wide range of petroleum products is needed.



SIZE : 25 mm up to 100 mm

Length : 60 metres

W.P.: 1000 Kpa

Kerbside Petrol Pump Hose

Hard wall nitrile lined hose, ideal for petrol and diesel pump dispensing where a flexible but stable hose is required.



SIZE: 20mm up to 25mm

Length: 60 metres

W.P.: 1000 Kpa
SPEC : T605

Acid/Chemical Suction and Delivery Hose

Suitable for conveying dilute and concentrated acids, salts and base solutions. (Heavy wall resists collapsing under suction.)



SIZE: 25mm up to 75mm

Length: 30 or 60 metres

W.P.: 1800 Kpa

Plain Vaccum Hose

Unreinforced plain nitrile hose, used in automotive applications where a petrol resistant hose is needed.



SIZE: 3mm, 5mm, 6mm,
8mm, 10mm, 12mm

Length: 10 metres

W.P.: 200 Kpa

Cotton Covered Fuel Hose

Robust fuel hose used on all petrol and diesel engines. Locally manufactured to ensure quality.



SIZE: 3mm, 5mm, 6mm,
8mm, 10mm, 12mm

Length: 10 metres

W.P.: 500 Kpa

Reinforced Rubber Fuel Hose

Used mainly by the automotive trade, but it can also be used in any application where a robust high pressure fuel hose needed.



SIZE: 3mm, 5 mm, 6 mm, 8mm, 10mm, 12mm

Length: 10 metres

W.P.: 1200 Kpa

Heater Hose

A rubber water hose that is heat resistant up to 120°C. It is used mainly in the automotive trade in heaters to convey water, or as a water over flow pipe. It is suitable for any hot water applications.



SIZE: 12mm, 16mm, 20mm

Length: up to 15 metres

W.P.: 500 Kpa

Straight Radiator Hose

EPDM lined to withstand 120°C. Ideal for the transfer of hot water or air in automobiles.



SIZE: 25mm up to 114mm

Length: 1 metres

W.P.: 500 Kpa

Yellow Rubber Steel Cord Reinforced Hose

A robust, long lasting, high pressure compressed air hose. It has an oil mist resistant liner, and the cover is abrasion resistant and pin pricked.



SIZE: 20mm up to 50mm

Length: 30 or 60 metres

W.P.: 4000 Kpa and 7000 Kpa

Pushloc Hose

An allround multipurpose hose suitable for a wide range of high pressure air, fuel, oil and water applications. standard colours available are grey and black, but blue, green and red are available on request. This hose conforms to the pushloc fitting requirements.



SIZE: 6mm, 10mm, 12mm 16mm and 20mm

Length: up to 214 metres

W.P.: 1700 Kpa

OTHER INDUSTRIAL HOSE

SIZE: 25mm up to 150mm

Length: up to 18 metres

W.P.: 700 Kpa

Chemical Composite Hose

Used as a general purpose chemical off loading hose particularly for concentrated sulphuric acid (Please note - this hose will not be supplied without fittings).



SIZE: 25mm up to 150mm

Length: up to 18 metres

W.P.: 1000 Kpa
SPEC: BSS 842

Stainless Steel Braided Hose

Conveys most manner of liquids and gases. It offers high working pressures and temperature, is crush, corrosion and penetration resistant and has a long life (Please note - this hose will not be supplied without fittings).



SIZE: 6mm up to 250mm

Length: Made to order

W.P.: 800 - 6400 Kpa
W.T.: 200°C up to 600°C

Flexible Exhaust Tubing

Available in galvanised or stainless steel. Suitable for commercial vehicles, set exhaust systems on generators, and also suitable for tar and bitumen transfer.



SIZE: 20mm up to 150mm

Length: up to 12 metres

W.P.: 950 - 2500 Kpa

Self Storing Airtool Hose

High pressure easy to use airline hose for pneumatic tools. Compact and recoils to original shape when not in use.



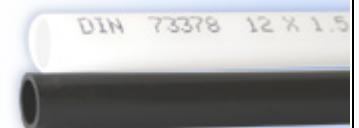
SIZE: ¼" up to ½"

Roll Size: Length: up to 15 metre working length

W.P.: 1750 Kpa

Nylon Tubing

Extremely flexible tube has a good resistance to a wide range of chemicals and can operate at a high working pressure and temperature. It is used mainly in the pneumatic industry.



SIZE: 4mm - 16mm / ¼" - ½"

Length: 30 metres

W.P.: 4950 - 18400 Kpa
Important: O.D. must be specified when ordering

Aludec Ducting Hose

A light weight aluminum ducting. Used in applications where a super flexible hose is needed to transfer air. An exceptional characteristic of aludec is that it can be used in high temperature applications up to 140°C.



SIZE: 63mm up to 610mm

Length: Sold in standard 10 metres

W.T.: 140 Degrees Celsius

Transparent Polyurethane Ducting

A robust super flexible ducting. It has an excellent working temperature – from -40C up to 90C. This ducting is non toxic, so it can be used in the food, cosmetic and pharmaceutical industries.



SIZE: 40mm up to 150mm

Length: 20 metres

ACCESSORIES

Wormdrive Hose Clamps

General everyday clamp used in a wide range of clamping applications. Available in mild steel, composite or stainless steel.



SIZE: 4mm upwards

Available in mid steel, composite and stainless steel

Heavy Duty Bolt Clamps

Robust high pressure clamp with a single bolt and nut. Ideal for applications where a strong clamp is needed.

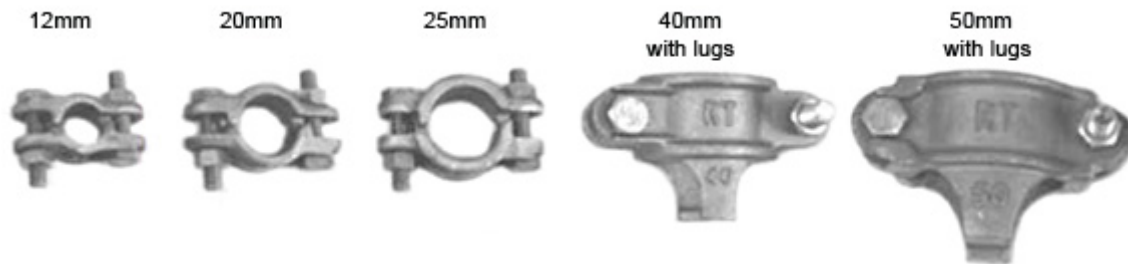


SIZE: 23mm upwards

Available in galvanised and stainless steel

Heavy Duty Double Bolt Cast Iron Clamps

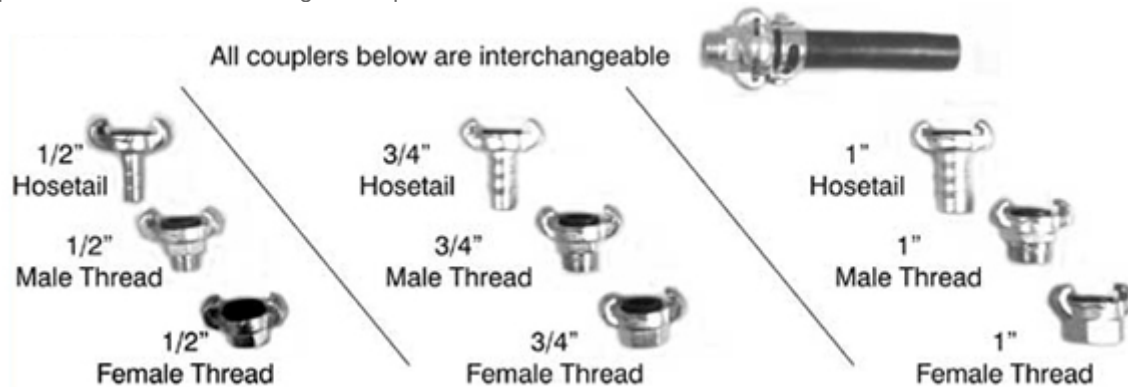
Top of the range heavy duty clamp consisting of two cast iron halves, with two bolts and nuts which are galvanised to prevent corrosion.



SIZE: 12mm up to 50mm (25mm up to 50mm available with lugs)

Claw Couplers

Cast iron galvanised coupling which is interchangeable between hose tail, male and female. Ideal for coupling different hoses to pneumatic tools without using an adaptor.



SIZE : 10mm up to 25mm

Gate Valves

Cast brass body and full bore with a non rising spindle. Suitable for conveying water and steam at 880 Kpa up to 175°C.



SIZE: 1/4" up to 4"

Ball Valves

Full bore brass valve suitable for air and water applications where the need to control flow is essential.



SIZE: 1/4" up to 4"

Non Return Valves

Brass bodied free flow valve. Spring loaded to close when flow is stopped. Flat type valve is available on request.



SIZE: 1/4" up to 4"

Galvanized Suction Strainer

A strainer is clamped on the end of a suction hose in order to prevent solids from being sucked up into the pump. There are two different hole sizes available on the larger size baskets.



SIZE: 40mm up to 200mm

Galvanized Swage Nipple

A male threaded hose tail, ideal for connecting hoses to any BSP female fitting. Threaded side is an imperial size and the hose tail side is a metric size.



SIZE: 12mm up to 200mm

Galvanized Hose Connector

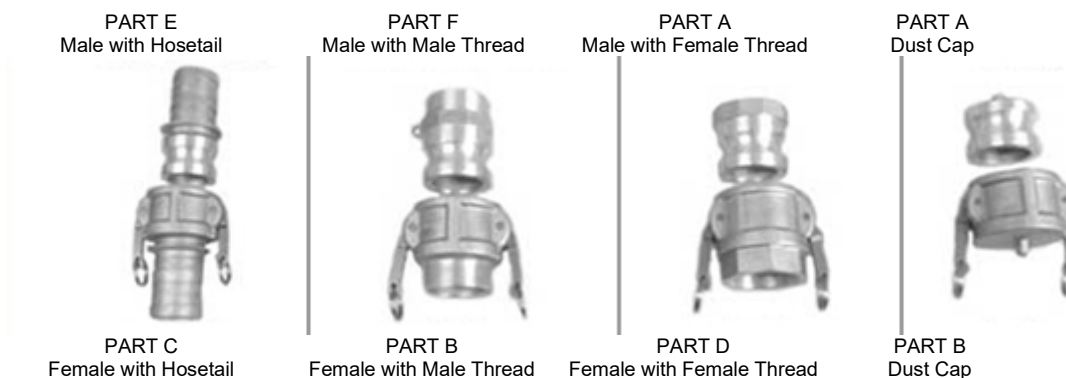
Swaged both sides to join or repair hoses quickly and efficiently. Suitable for any hose in the industry.



SIZE: 12mm up to 250mm

Kamlock Quick Coupler

A complete range of couplers and adaptors available in aluminum, brass, poly propylene and stainless steel. Easy to couple and suitable for a wide range of air, water and chemical applications.



SIZE: 12mm up to 150mm

SEALS : Buna N, Vitron, EPT and Teflon Env.

Perrot Couplers

Galvanized heavy duty coupling. Used in the agricultural and industrial fields for water applications. Both couplers and adaptors are available in hose tail and male threaded variations. Different sizes are not interchangeable.



SIZE : 50mm up to 150mm

Hose tail couplers and adaptors are: KMS & KVS
Male threaded couplers and adaptors are: KMG & KVG

Flanged Nipple

Galvanized hose tail, complete with flange welded onto it. These are supplied off the shelf with standard table D flanges, but other flanges can be supplied on request.



SIZE: 40mm up to 200mm

PRESSURE GAUGE COCKS
Service intended

To isolate the pressure gauge from the pressure medium to enable pressure gauge replacement or to enable sampling and inspection

Sizes

1/4", 3/8" & 1/2" female ends standard.

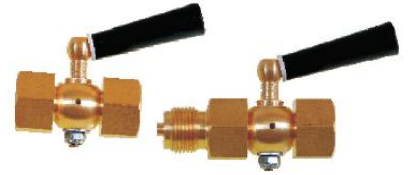
Optional: Female swivel nut or male fixed fitting.

Construction

Brass

Pressure rating

Maximum pressure 2500 kPa


PRESSURE GAUGE ADAPTORS
Service intended

To increase or reduce the thread size of the pressure gauge to suit the process connection.

Pressure rating

Maximum pressure brass 100 MPa
Maximum pressure s/steel 160 MPa

Sizes

1/4" BSPT or NPT fm to 3/8" or 1/2" BSP & NPT male
3/8" BSPT or NPT fm to 1/4" or 1/2" BSP & NPT male
1/2" BSPT or NPT fm to 1/4" or 3/8" BSP & NPT male

Material

Brass or stainless steel 316.


PRESSURE GAUGE SYPHON TUBES
Service intended

To isolate the pressure gauge from steam or other hot media that could damage the gauge internal parts.
U shape for horizontal mounting
Pigtail (trumpet) shape for vertical mounting.

Material

1/4" shed 40 tubing. Carbon steel tubing with brass gauge adaptors or s/steel tubing with s/steel gauge adaptors.

Pressure rating

Maximum pressure 16 MPa

Process connection

1/4", 3/8" & 1/2" BSP or NPT male or female gauge adaptors in brass or stainless steel.


CAPILLARY ASSEMBLIES
Service intended

To protect and remove pressure gauge from vibration or excessively high process media temperatures. To enable distant reading.

Process connection

1/4", 3/8" & 1/2" BSP or NPT male or female gauge adaptors in brass or stainless steel.

Material

Capillary: Copper or stainless steel 3.2mm dia
Connectors: Brass or stainless steel

Pressure rating

Copper: maximum pressure 4000 kPa
S/steel: maximum pressure 100 MPa


COOLING TOWERS
Service intended

To protect pressure gauge from excessively high process media temperatures.

Process connection

1/4", 3/8" & 1/2" BSP or NPT gauge connection with 1/2" BSP process connection standard.

Material

Stainless steel 316.

Pressure rating

Maximum pressure 60 MPa.


PRESSURE GAUGE RUBBER COVERS
Service intended

To protect portable field service pressure gauges against shock and rough handling.

Configuration

Will suit bottom or rear mounting pressure gauges without flanges.

Material

Natural rubber.

Size

63 & 100 mm standard.
Other sizes available on request.



NORMACLAMP® – Hose Clamps

NORMACLAMP® GBS – Heavy duty clamps to DIN 3017

NORMACLAMP® GBS are particularly suited for sealing suction and pressure lines with plastic or steel reinforcements and high

shore hardnesses. Their distinguishing feature is the extremely high band tensile force.

The assembly of NORMACLAMP® GBS is easily completed by means of either manual, pneumatic or electric standard tools.

Short description of technical features



- ❶ W1/W2/W4
New specially designed bolt with integrated spacer
= improved efficiency, cannot get lost
W5
Hexagonal socket screw

- ❷ Reinforced loops
= allow to withstand significantly higher torques

- ❸ Mechanically locked closure
= no welding points, no contact corrosion

- ❹ Bridge = optimal hose protection

- ❺ Robust band with rounded edges
= protection against injuries and damage to the hose surface

Materials

W1*	W2*	W4	W5
X	X	X	X

* No Chromium VI used for surface treatment of closure unit

NORMAFIX® – Retaining Products



NORMAFIX® RS/RSGU/RLGU
Pipe retaining clips to DIN 3016

NORMAFIX® RS/RSGU pipe retaining clips are the ideal retaining elements for pipes, cables, cable harnesses, cable protection pipes, hoses and other applications.

Short description of technical features

NORMAFIX®
Retaining Products

Type 1



1 Form fitting and adjustable band
= ease of assembly
= safe attachment

2 Reinforced band ends
= prevent the clip from tearing or loosening in cases where there is a high mechanical load

3 Optionally supplied with EPDM profile
= vibration damping & protection against seepage water
= sound insulation
= clip fits tight on object

Materials

W1	W2	W3	W4	W5
x		x*	x*	x

* on request

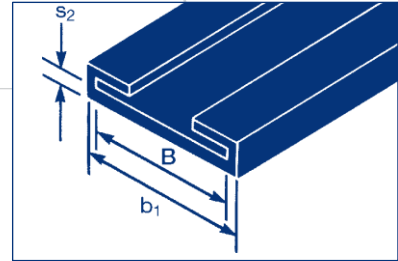
NORMAFIX® – Retaining Products

EPDM profile

Material properties of EPDM profile

Material properties	EPDM profile
Tensile strength [N/mm ²]	min. 8
Elongation at break [%]	350
Shore hardness A	70 ± 5
Temperature [°C]	-40 up to +120
Resistance against:	
Weather/ozone	Very good
Ageing and light	Very good
Petrol	Unstable
Oil and grease	Unstable
Alcohols	Good
Acids	Good
Alkalis	Good

Silicone profile on demand.

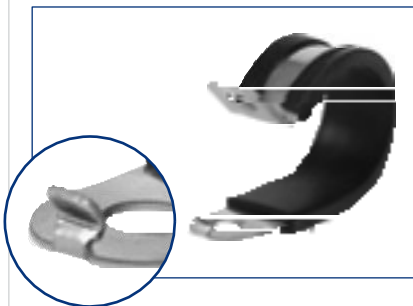


B = Band width of clamp
 b₁ = Width in mm
 s₂ = Material thickness in mm

Clip types



The standard version NORMAFIX® RS/RSGU clips (**Type 1**) are also available in a round shape (NORMAFIX® RS/RSGU **Type 0**) or open shaped (NORMAFIX® RS/RSGU **Type 2**).



In addition to the designs already mentioned we offer the NORMAFIX® RC clip. This special design, a variation of the standard RS/RSGU Type 1, is provided with an integrated mounting fastener. When the clip ends are compressed the fastener locks into place and locks the clip. Thus the NORMAFIX® RC can be easily preassembled on the pipe.

Diameters and band widths will be furnished on request.



Recently a new type, the NORMAFIX® RLGU, was added to our NORMAFIX® range. It is also a variation of the standard Type 1, but without reinforced band ends and therefore suitable for use in applications submitted to only slight mechanical loads as, for example, the fastening of cables.

NORMAFIX® RLGU are only available in band width 12 mm.
 For the complete programme please refer to the table of sizes.

All NORMAFIX® pipe retaining clips are available with a special sound damping rubber profile as optional equipment.

NORMAFIX® – Retaining Products

Screw

The clips are furnished without screws and nuts.
We recommend:

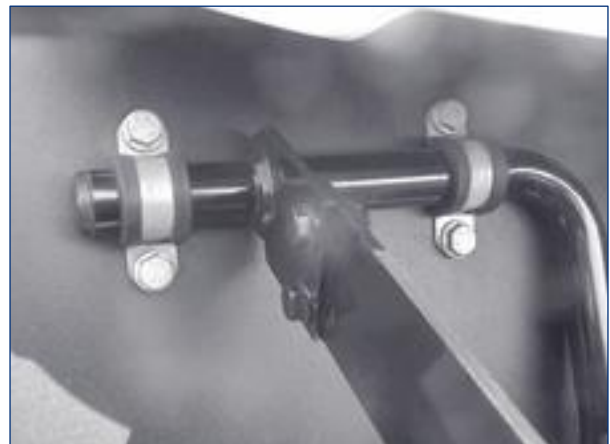
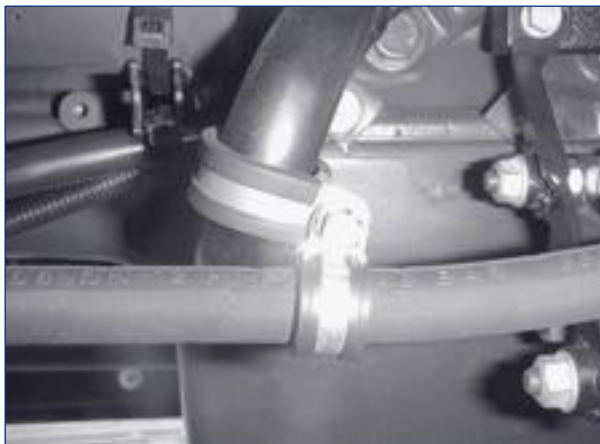
- For NORMAFIX® RSGU band width 12 mm – Screw M 5
- For NORMAFIX® RSGU band width 15 mm – Screw M 6
- For NORMAFIX® RSGU band width 20 mm – Screw M 8
- For NORMAFIX® RLGU band width 12 mm – Screw M 6



NORMAFIX®
Retaining Products

Applications

- Any kind of fixing and retaining



NORMAFIX® – Retaining Products

Survey of sizes, band widths & materials NORMAFIX® RSGU/RS

Band width (mm)	Description	Clamping Range		Packaging PU	W1	W5
		in mm	in Inches			
12	RSGU 1.6/12	6	1/4	100	X	X
12	RSGU 1.8/12	8	5/16	100	X	X
12	RSGU 1.10/12	10	3/8	100	X	X
12	RSGU 1.12/12	12	1/2	100	X	X
12	RSGU 1.13/12	13	1/2	100	X	X
12	RSGU 1.14/12	14	9/16	100	X	X
12	RSGU 1.15/12	15	5/8	100	X	X
12	RSGU 1.16/12	16	5/8	100	X	X
12	RSGU 1.18/12	18	3/4	100	X	X
12	RSGU 1.19/12	19	3/4	100	X	X
12	RSGU 1.20/12	20	13/16	100	X	X
12	RSGU 1.21/12	21	13/16	100	X	X
12	RSGU 1.22/12	22	7/8	100	X	X
15	RSGU 1.6/15	6	1/4	100	X	X
15	RSGU 1.8/15	8	5/16	100	X	X
15	RSGU 1.10/15	10	3/8	100	X	X
15	RSGU 1.12/15	12	1/2	100	X	X
15	RSGU 1.13/15	13	1/2	100	X	X
15	RSGU 1.14/15	14	9/16	100	X	X
15	RSGU 1.15/15	15	5/8	100	X	X
15	RSGU 1.16/15	16	5/8	100	X	X
15	RSGU 1.18/15	18	3/4	100	X	X
15	RSGU 1.19/15	19	3/4	100	X	X
15	RSGU 1.20/15	20	13/16	100	X	X
15	RSGU 1.21/15	21	13/16	100	X	X
15	RSGU 1.22/15	22	7/8	100	X	X
15	RSGU 1.23/15	23	7/8	100	X	X
15	RSGU 1.25/15	25	1	100	X	X
15	RSGU 1.26/15	26	1 1/16	100	X	X
15	RSGU 1.28/15	28	1 1/8	100	X	X
15	RSGU 1.30/15	30	1 3/16	100	X	X
15	RSGU 1.32/15	32	1 1/4	100	X	X
15	RSGU 1.34/15	34	1 5/16	100	X	X
15	RSGU 1.35/15	35	1 3/8	100	X	X

PU=packaging unit

NORMAFIX® – Retaining Products

Survey of sizes, band widths & materials

NORMAFIX® RSGU

Band width (mm)	Description	Clamping Range		Packaging PU	W1	W5
		in mm	in Inches			
20	RSGU 1.10/20	10	3/8	100	X	X
20	RSGU 1.12/20	12	1/2	100	X	X
20	RSGU 1.13/20	13	1/2	100	X	X
20	RSGU 1.14/20	14	9/16	100	X	X
20	RSGU 1.15/20	15	5/8	100	X	X
20	RSGU 1.16/20	16	5/8	100	X	X
20	RSGU 1.18/20	18	3/4	100	X	X
20	RSGU 1.19/20	19	3/4	100	X	X
20	RSGU 1.20/20	20	13/16	100	X	X
20	RSGU 1.22/20	22	7/8	100	X	X
20	RSGU 1.23/20	23	7/8	100	X	X
20	RSGU 1.24/20	24	15/16	100	X	X
20	RSGU 1.25/20	25	1	100	X	X
20	RSGU 1.28/20	28	1 1/8	100	X	X
20	RSGU 1.30/20	30	1 3/16	100	X	X
20	RSGU 1.32/20	32	1 1/4	100	X	X
20	RSGU 1.34/20	34	1 5/16	100	X	X
20	RSGU 1.35/20	35	1 3/8	100	X	X
20	RSGU 1.36/20	36	1 7/16	100	X	X
20	RSGU 1.38/20	38	1 1/2	100	X	X
20	RSGU 1.40/20	40	1 9/16	100	X	X

PU=packagingunit

Enquiries/ordering:

When making enquiries or placing orders please state as follows:

	1. Type	2. Clamping Range (pipe outside diameter)	3. Band width	4. Material
Example	RSGU 1.	6/	12	W1

NORMAFIX® – Retaining Products

Survey of sizes, band widths & materials

NORMAFIX® RLGU

Band width (mm)	Description	Clamping Range		Packaging PU	W1
		in mm	in Inches		
12	RLGU 1.5/12	5	3/16	100	X
12	RLGU 1.6/12	6	1/4	100	X
12	RLGU 1.7/12	7	5/16	100	X
12	RLGU 1.8/12	8	5/16	100	X
12	RLGU 1.9/12	9	3/8	100	X
12	RLGU 1.10/12	10	3/8	100	X
12	RLGU 1.11/12	11	7/16	100	X
12	RLGU 1.12/12	12	1/2	100	X
12	RLGU 1.13/12	13	1/2	100	X
12	RLGU 1.14/12	14	9/16	100	X
12	RLGU 1.15/12	15	5/8	100	X
12	RLGU 1.16/12	16	5/8	100	X
12	RLGU 1.17/12	17	11/16	100	X
12	RLGU 1.18/12	18	3/4	100	X
12	RLGU 1.19/12	19	3/4	100	X
12	RLGU 1.20/12	20	13/16	100	X
12	RLGU 1.21/12	21	13/16	100	X
12	RLGU 1.22/12	22	7/8	100	X
12	RLGU 1.23/12	23	7/8	100	X
12	RLGU 1.24/12	24	15/16	100	X
12	RLGU 1.25/12	25	1	100	X
12	RLGU 1.26/12	26	1 1/16	100	X
12	RLGU 1.27/12	27	1 1/16	100	X
12	RLGU 1.28/12	28	1 1/8	100	X
12	RLGU 1.29/12	29	1 1/8	100	X
12	RLGU 1.30/12	30	1 3/16	100	X
12	RLGU 1.31/12	31	1 1/4	100	X
12	RLGU 1.32/12	32	1 1/4	100	X
12	RLGU 1.33/12	33	1 5/16	100	X
12	RLGU 1.34/12	34	1 5/16	100	X
12	RLGU 1.35/12	35	1 3/8	100	X
12	RLGU 1.36/12	36	1 7/16	100	X
12	RLGU 1.37/12	37	1 7/16	100	X
12	RLGU 1.38/12	38	1 1/2	100	X
12	RLGU 1.39/12	39	1 9/16	100	X
12	RLGU 1.40/12	40	1 9/16	100	X
12	RLGU 1.41/12	41	1 5/8	100	X
12	RLGU 1.42/12	42	1 5/8	100	X
12	RLGU 1.43/12	43	1 11/16	100	X
12	RLGU 1.44/12	44	1 3/4	100	X
12	RLGU 1.45/12	45	1 3/4	100	X

PU=packaging unit

NORMAFIX® – Retaining Products

NORMAFIX® RS 0.

Pipe retaining clip type 0, without rubber sleeve

Bandwidth (mm)	Min. Ø ¹⁾	d	h1 ²⁾ (mm) ≈	l	s		
					W1	W3	W5
9	5	4.3 (M4)	4.7 + $\frac{0}{2}$	3.8	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{0}{2}$	5.0	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{0}{2}$	6.0	... Ø 14 = 0.6 from Ø 15 = 0.8	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{0}{2}$	8.5	... Ø 25 = 0.8 from Ø 26 = 1.0	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{0}{2}$	10.0	... Ø 49 = 1.0 from Ø 50 = 1.25	1.0	1.0



NORMAFIX® RSGU 0.

Pipe retaining clip type 0, with rubber sleeve

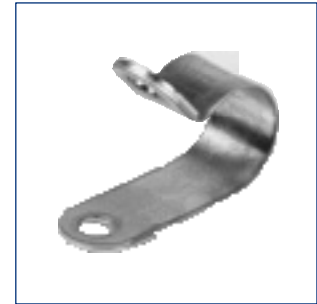
Band width (mm)	Min. Ø ¹⁾	n1 ²⁾ (mm) ≈	Rubber Sleeve			
			b1	s2	EPDM	Silicone
9	4	5.7 + $\frac{0}{2}$	12.5	1.0	•	–
12	4	8.0 + $\frac{0}{2}$	15.0	1.2	•	•
15	5	11.2 + $\frac{0}{2}$	18.5	1.5	•	•
20	10	14.5 + $\frac{0}{2}$	25.0	2.0	•	•
25	15	17.5 + $\frac{0}{2}$	31.0	3.0	•	•



NORMAFIX® RS 1.

Pipe retaining clip type 1, without rubber sleeve

Band width (mm)	Min. Ø ¹⁾	d	h1 ²⁾ (mm) ≈	l	s		
					W1	W3	W5
9	5	4.3 (M4)	4.7 + $\frac{0}{2}$	3.8	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{0}{2}$	5.0	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{0}{2}$	6.0	... Ø 14 = 0.6 from Ø 15 = 0.8	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{0}{2}$	8.5	... Ø 25 = 0.8 from Ø 26 = 1.0	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{0}{2}$	10.0	... Ø 49 = 1.0 from Ø 50 = 1.25	1.0	1.0



NORMAFIX® RSGU 1.

Pipe retaining clip type 1, with rubber sleeve

Band width (mm)	Min. Ø ¹⁾	n1 ²⁾ (mm) ≈	Rubber Sleeve			
			b1	s2	EPDM	Silicone
9	4	5.7 + $\frac{0}{2}$	12.5	1.0	•	–
12*	6	8.0 + $\frac{0}{2}$	15.0	1.2	•	•
15*	6	11.2 + $\frac{0}{2}$	18.5	1.5	•	•
20*	10	14.5 + $\frac{0}{2}$	25.0	2.0	•	•
25	15	17.5 + $\frac{0}{2}$	31.0	3.0	•	•



* Standard range

NORMAFIX® – Retaining Products

NORMAFIX® RS 2.

Pipe retaining clips type 2, without rubber sleeve

Bandwidth (mm)	Min. Ø ¹⁾	d	h1 ²⁾ (mm) ≈	l	s		
					W1	W3	W5
9	5	4.3 (M4)	4.7 + $\frac{0}{2}$	3.8	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{0}{2}$	5.0	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{0}{2}$	6.0	... Ø 14 = 0.6 from Ø 15 = 0.8	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{0}{2}$	8.5	... Ø 25 = 0.8 from Ø 26 = 1.0	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{0}{2}$	10.0	... Ø 49 = 1.0 from Ø 50 = 1.25	1.0	1.0



NORMAFIX® RSGU 2.

Pipe retaining clip type 2, with rubber sleeve

Band width (mm)	Min. Ø ¹⁾	n1 ²⁾ (mm) ≈	Rubber Sleeve			
			b1	s2	EPDM	Silicone
9	4	5.7 + $\frac{0}{2}$	12.5	1.0	•	–
12	4	8.0 + $\frac{0}{2}$	15.0	1.2	•	•
15	5	11.2 + $\frac{0}{2}$	18.5	1.5	•	•
20	10	14.5 + $\frac{0}{2}$	25.0	2.0	•	•
25	15	17.5 + $\frac{0}{2}$	31.0	3.0	•	•



NORMAFIX® RLGU

Pipe retaining clip type 1, with rubber sleeve

Band width (mm)	Min. Ø ¹⁾	d	h1 ²⁾ (mm) ≈	l	Rubber Sleeve			s W1
					b1	s2	EPDM	
12	4	6.4 (M6)	11.2 + $\frac{0}{2}$	6	15	1.2	•	... Ø 11 = 0.6 from Ø 12 = 0.8



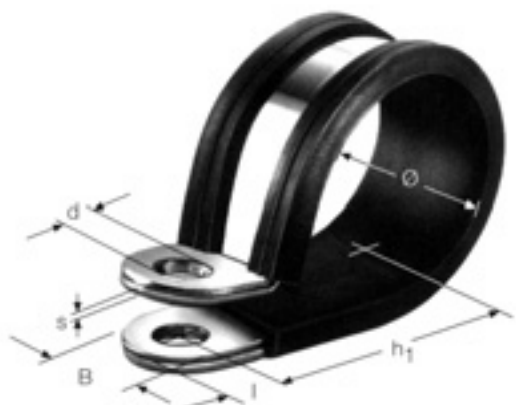
1) The increments are in steps of 1 mm.

b1 = Width in mm

2) Tool

s2 = Material thickness in mm (see page 89)

Bolts and nuts are not included in the delivery.



Abbreviations used in the table entries