



PRESSURE GAUGES

HYDRAULIC OIL • WATER • PNEUMATIC



Fluid-Tec Engineering & Trading Pte Ltd

No. 5 Kian Teck Way Singapore 628733

Tel : +65 6264-3881 Fax : +65 6265-9707

Website: www.fluid-tec.net Email: fluidtec@singnet.com.sg



GENERAL APPLICATION

Pressure gauge are designed for use on power units, pumps, hydro-cleaning machines, presses, engine, compressors, turbines, diesel engines, chemical, petrochemical and refrigerating plants and on machines and equipment where pulsating pressures or mechanical vibrations are apparent.

RECOMMENDATION

All gauges components should be selected on the basis of the fluid and operating conditions.

Select a gauge with a full scale pressure range of approximately twice the normal operating pressure. The maximum operating pressure should not exceed approximately 75% of the full scale range.



AMBIENT TEMPERATURE

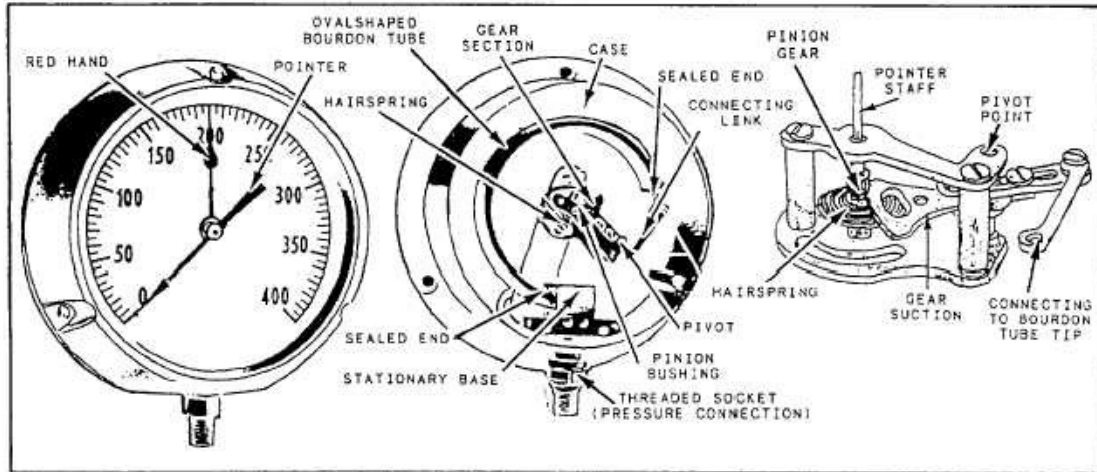
Temperature should not exceed +65°C/150°F to avoid:

- dial discolouration
- dampening fluid leakage due to increased fluid volume
- reduce dampening effect of the fluid
- gasket hardening

Dampening Liquid	Limit ambient temperature	
Glycerine filled 98%	15/65°C	60/150°F
Silicone oil filled	-45/65°C	-50/150°F
Fluorolube filled	-60/65°C	-76/150°F

Glycerine or silicone should not be used with highly oxidising agents because of danger of spontaneous chemical reaction, inflammability or explosion. Fluorinated fluid is recommended in these cases.

CONSTRUCTION



Components	Standard	Stainless Steel
Socket Material	OT 58 brass	AISI 316 stainless steel
Elastic Element	Phosphor bronze	AISI 316 stainless steel
Movement	Gearing, OT 59 brass, plate	Reinforced of stainless steel
Pointer	Black oxidised aluminium	Balance aluminium or stainless steel
Dial	White aluminium with black markings	
Case	AISI 304 stainless steel	
Gasket	Polychloroprene	
Window	Plexiglass	
Ring	AISI 304 stainless steel polished, crimped	
Protection	IP 65	

DIAMETER, PRESSURE RANGE, CONNECTIONS

Standard Pressure Range

Diameter	Pressure Range	Connection
40mm (1½")	0 - 400 Bar 0 - 5,800 Psi	BSP ⅛" (M) NPT ⅛" (M)
63mm (2½")	0 - 400 Bar 0 - 5,800 Psi	BSP ¼" (M) NPT ¼" (M)
100mm (4")	0 - 1,000 Bar 0 - 14,500 Psi	BSP ½" (M) NPT ½" (M)
160mm (6")	0 - 1,000 Bar 0 - 14,500 Psi	BSP ½" (M) NPT ½" (M)



Standard Bottom Connection



Solid Front/Blow-out Back



U-Clamp Panel Mount



Back Connection

Ultra High Pressure Range

Diameter	Pressure Range	Connection
100mm (4")	0 - 4,000 Bar 0 - 58,000 Psi	BSP ½" (M) 9/16"-24 UNF (F)
160mm (6")	0 - 4,000 Bar 0 - 58,000 Psi	BSP ½" (M) 9/16"-24 UNF (F)



Rear Flange



Front Flange Panel Mount

Ø40MM (1.5") STANDARD PRESSURE GAUGE



SPECIFICATIONS & CONSTRUCTION

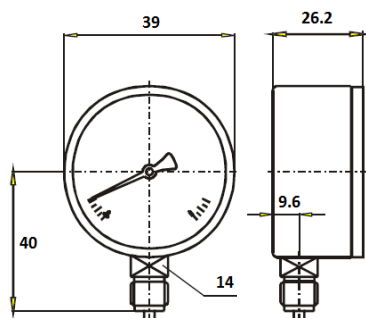
Display Type	Weight
Dual scale with primary in Bar	0.11KG
Dial Face	Connection Type
40mm (1.5")	1/8" NPT - Bottom or Back Connection
Accuracy	1/8" BSPP - Bottom or Back Connection
2.5 to EN837-1	Application
Temperature	Constant load : 3/4 x full scale value
Medium : -20°C to +60°C	Dynamic load : 2/3 x full scale value
Ambient : -20°C to +60°C	Short Time : Full scale value

APPLICATION

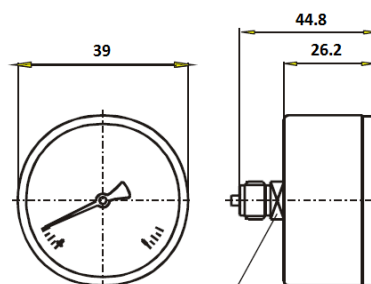
- Building Services
- Apparatus Construction
- Air-Conditioning
- Pneumatics
- Hydraulics
- Workshop Equipments

CONSTRUCTION & DIMENSIONS

Case	Window	Dial & Pointer
Shock Resistant (ABS)	Plexiglass	Plastic
Bezel	Movement	Measuring Element
None	CuZn - Alloy	Cu Alloy



Bottom Connection



Back Connection

PRESSURE RANGE

External Bar (0...)	Internal Psi (0...)
1	14
1.6	20
2.5	30
4	50
6	82
10	140
16	200
25	300
40	500

Ø63MM (2.5") HEAVY DUTY PRESSURE GAUGE



SPECIFICATIONS & CONSTRUCTION

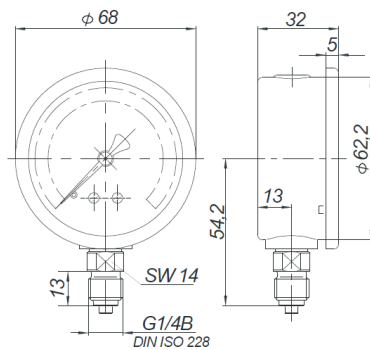
Display Type	Weight
Dual scale with primary in Bar	0.26KG
Dial Face	Connection Type
63mm (2.5")	1/4" NPT - Bottom or Back Connection 1/4" BSPP - Bottom or Back Connection
Accuracy	Application
1.6 to EN837-1	Constant load : 3/4 x full scale value Dynamic load : 2/3 x full scale value
Temperature	
Medium : -25°C to +80°C Ambient : -25°C to +60°C	

APPLICATION

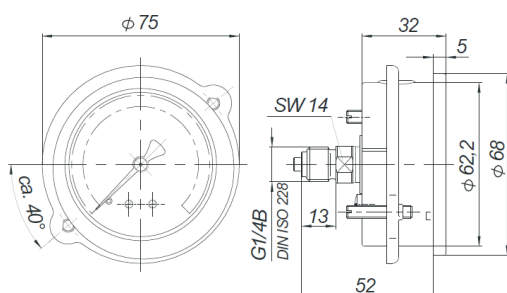
- Food Industry
- Chemical Industry
- Mining Industry
- Shipyard
- Waste Water Technology
- General Marine Construction
- Hydraulics
- Pumps
- Compressor
- High Pressure Cleaning Devices

CONSTRUCTION & DIMENSIONS

Case	Window	Dial & Pointer
Stainless Steel 1.4301 Bright	Plexiglass	Aluminium
Bezel	Movement	Measuring Element
Stainless Steel 1.4301 Bright	CuZn - Alloy	Copper Alloy : up to 40bar Helical Tube : up to 60bar SS Helical Tube : ≥ 400bar



Bottom Connection



Back Connection

PRESSURE RANGE

External Bar (0...)	Internal Psi (0...)
1	14
1.6	20
2.5	35
4	55
6	85
10	145
16	230
20	290
25	360
40	580
60	870
100	1,450
160	2,300
200	2,900
250	3,600
300	4,350
400	5,800
600	8,700
700	10,150
1,000	14,500

Ø100MM (4.0") HEAVY DUTY PRESSURE GAUGE



SPECIFICATIONS & CONSTRUCTION

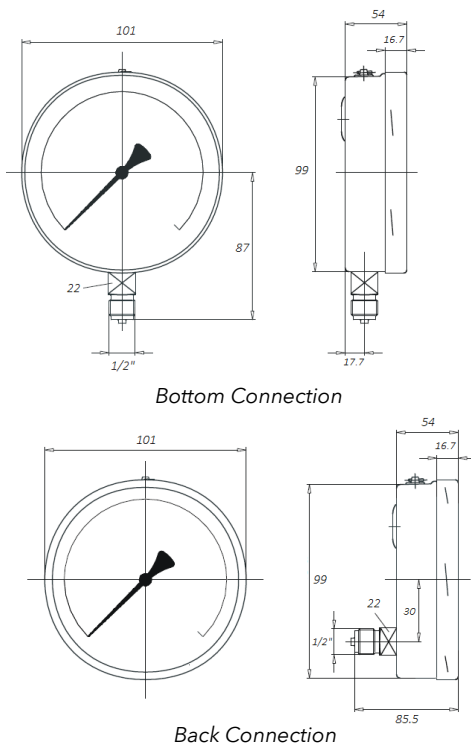
Display Type Dual scale with primary in Bar	Weight 0.9KG
Dial Face 100mm (4.0")	Connection Type 1/2" NPT - Bottom or Back Connection 1/2" BSPP - Bottom or Back Connection
Accuracy 1.0 to EN837-1	Application Constant load : Up to full scale value Dynamic load : 0.9 x full scale value Short time : Overload Capacity 1.3x
Temperature Medium : -25°C to +80°C Ambient : -25°C to +60°C	

APPLICATION

- Iron & Steel Industry
- Power Stations
- General Mechanical Engineering
- Pumps
- Hydraulic
- Compressors
- Water Treatment Plants

CONSTRUCTION & DIMENSIONS

Case Stainless Steel 1.4301 with pressure relief opening	Window Plexiglass	Dial & Pointer Aluminium
Bezel Stainless Steel 1.4301 Bayonet Ring	Movement CuZn - Alloy	Measuring Element Copper Alloy : up to 100bar SS 316L : ≥ 100bar



PRESSURE RANGE

External Bar (0...)	Internal Psi (0...)
1	14
1.6	20
2.5	35
4	55
6	85
10	145
16	230
20	290
25	360
40	580
60	870
100	1,450
160	2,300
200	2,900
250	3,600
300	4,350
400	5,800
600	8,700
700	10,150
1,000	14,500



Ø160MM (6.0") ALL STAINLESS STEEL PRESSURE GAUGE



SPECIFICATIONS & CONSTRUCTION

Display Type

Dual scale with primary in Bar

Dial Face

160mm (6.0")

Accuracy

1.0 to EN837-1

Temperature

Medium : -25°C to +100°C

Ambient : -25°C to +60°C

Weight

2.1KG

Connection Type

1/2" NPT - Bottom or Back Connection

1/2" BSPP - Bottom or Back Connection

Application

Constant load : Up to full scale value

Dynamic load : 0.9 x full scale value

APPLICATION

- Chemical & Petrochemical Industry
- Plastic & Paper Industry
- Food & Beverages Industry
- Machine & Apparatus Construction
- Testing Equipment
- Pumps
- Hydraulic
- Compressors

CONSTRUCTION & DIMENSIONS

Case

Stainless Steel 1.4301 with pressure relief opening

Bezel

Stainless Steel 1.4301

Bayonet Ring

Window

Plexiglass

Movement

Stainless

Steel 1.4301

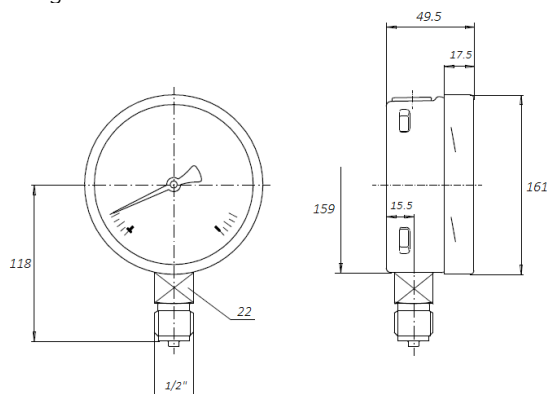
Dial & Pointer

Aluminium

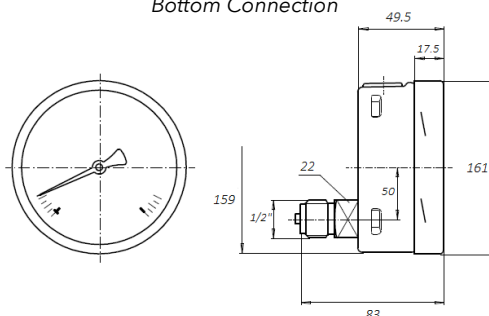
Measuring Element

SS316L Bourdon Tube : ≤ 60bar

SS316L Helical Tube: ≥ 100bar



Bottom Connection

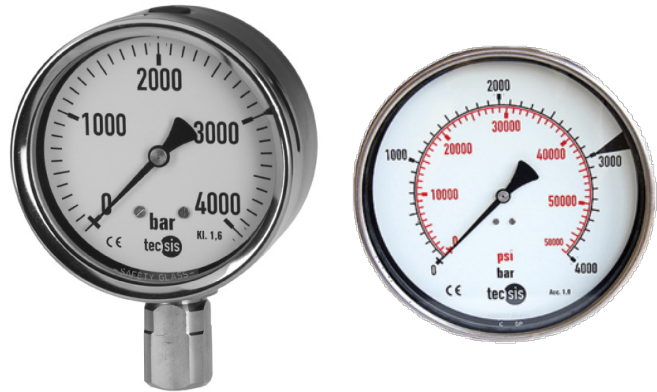


Back Connection

PRESSURE RANGE

External Bar (0...)	Internal Psi (0...)
250	3,600
400	5,800
700	10,150
1,000	14,500

Ø100MM (4.0") ULTRA HIGH PRESSURE PRESSURE GAUGE



SPECIFICATIONS & CONSTRUCTION

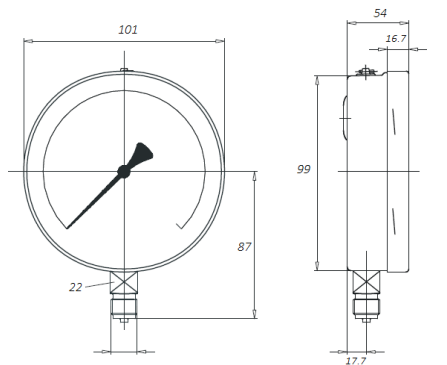
Display Type Dual scale with primary in Bar	Weight 0.7KG
Dial Face 100mm (4.0")	Connection Type 9/16"x18 UNF - Bottom or Back Connection 1/2" BSPP - Bottom or Back Connection
Accuracy 1.6 to EN837-1	Application Constant load : 3/4 full scale value Dynamic load : 2/3 full scale value Short time : Overload Capacity 1.1x
Temperature Medium : -25°C to +80°C Ambient : -25°C to +60°C	

APPLICATION

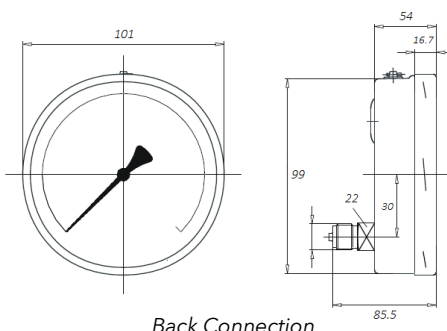
- Machine & Apparatus Construction
- Special pumps and machinery
- Testing Equipments
- Water Blasting Industry

CONSTRUCTION & DIMENSIONS

Case Stainless Steel 1.4301 with pressure relief opening	Window Safety Glass	Dial & Pointer Aluminium
Bezel Stainless Steel 1.4301 Bayonet Ring	Movement Brass or Copper Alloy	Measuring Element Stainless Steel : Up to 2,760bar NiSpan C : ≥ 3,000bar



Bottom Connection

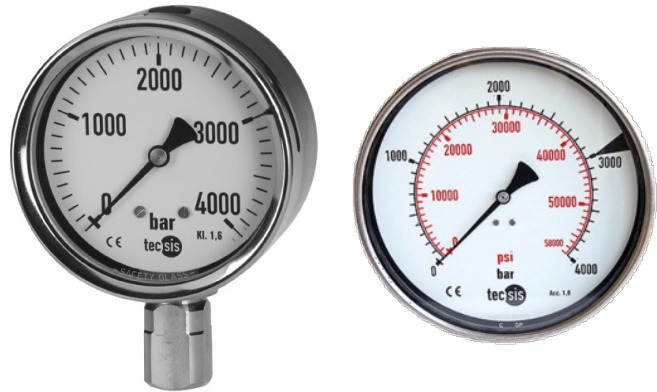


Back Connection

PRESSURE RANGE

External Bar (0...)	Internal Psi (0...)
1,600	23,200
2,000	29,000
2,500	36,250
3,000	43,500
4,000	58,000
6,000	87,000

160MM (6.0") ULTRA HIGH PRESSURE PRESSURE GAUGE



SPECIFICATIONS & CONSTRUCTION

Display Type Dual scale with primary in Bar	Weight 1.1KG
Dial Face 100mm (4.0")	Connection Type 9/16"x18 UNF - Bottom or Back Connection 1/2" BSPP - Bottom or Back Connection
Accuracy 1.6 to EN837-1	Application Constant load : 3/4 full scale value Dynamic load : 2/3 full scale value Short time : Overload Capacity 1.1x
Temperature Medium : -25°C to +80°C Ambient : -25°C to +60°C	

APPLICATION

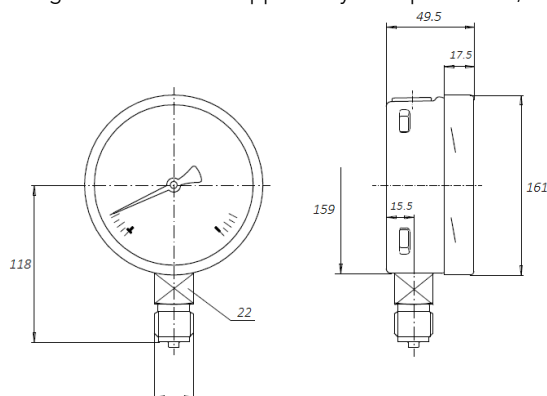
- Machine & Apparatus Construction
- Special pumps and machinery
- Testing Equipments
- Water Blasting Industry

CONSTRUCTION & DIMENSIONS

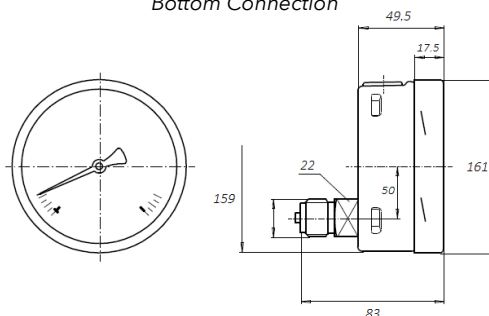
Case Stainless Steel 1.4301 with pressure relief opening	Window Safety Glass	Dial & Pointer Aluminium
Bezel Stainless Steel 1.4301 Bayonet Ring	Movement Brass or Copper Alloy	Measuring Element Stainless Steel : Up to 2,760bar NiSpan C : ≥ 3,000bar

PRESSURE RANGE

External Bar (0...)	Internal Psi (0...)
1,600	23,200
2,000	29,000
2,500	36,250
3,000	43,500
4,000	58,000
6,000	87,000



Bottom Connection



Back Connection

Ø63MM (2.5") VACUUM GAUGE

SPECIFICATIONS & CONSTRUCTION

Display Type	Weight
Dual scale with primary in cmHg	0.26KG
Dial Face	Connection Type
63mm (2.5")	1/4" NPT - Bottom or Back Connection 1/4" BSPP - Bottom or Back Connection
Accuracy	Application
1.6 to EN837-1	Constant load : 3/4 x full scale value Dynamic load : 2/3 x full scale value
Temperature	
Medium : -25°C to +80°C Ambient : -25°C to +60°C	

APPLICATION

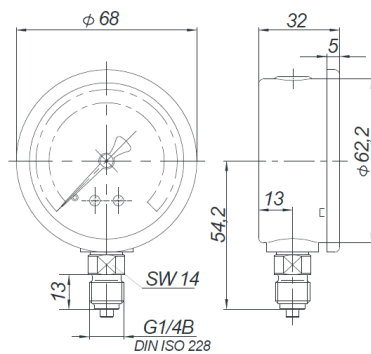
- Chemical & Petrochemical Industry
- Pharmaceutical & Cosmetic Industry
- Food & Beverage Industry
- Vacuum, Drying & Bottling Systems

CONSTRUCTION & DIMENSIONS

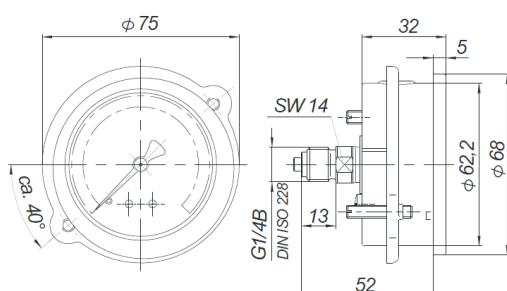
Case	Window	Dial & Pointer
Stainless Steel 1.4301 Bright	Plexiglass	Aluminium
Bezel	Movement	Measuring Element
Stainless Steel 1.4301 Bright	CuZn - Alloy	Copper Alloy : up to 40bar

PRESSURE RANGE

External cmHg (0...)	Internal inHg (0...)
-76	-30



Bottom Connection



Back Connection

Ø63MM (2.5") COMPOUND GAUGE

SPECIFICATIONS & CONSTRUCTION

Display Type	Weight
Dual scale with primary in Bar	0.26KG
Dial Face	Connection Type
63mm (2.5")	1/4" NPT - Bottom or Back Connection 1/4" BSPP - Bottom or Back Connection
Accuracy	Application
1.6 to EN837-1	Constant load : 3/4 x full scale value Dynamic load : 2/3 x full scale value
Temperature	
Medium : -25°C to +80°C Ambient : -25°C to +60°C	

APPLICATION

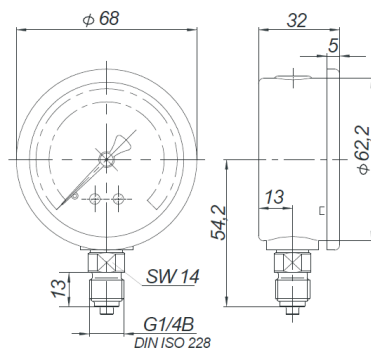
- Chemical & Petrochemical Industry
- Pharmaceutical & Cosmetic Industry
- Food & Beverage Industry
- Vacuum, Drying & Bottling Systems

CONSTRUCTION & DIMENSIONS

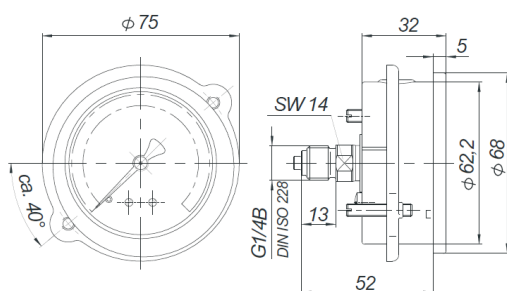
Case	Window	Dial & Pointer
Stainless Steel 1.4301 Bright	Plexiglass	Aluminium
Bezel	Movement	Measuring Element
Stainless Steel 1.4301 Bright	CuZn - Alloy	Copper Alloy : up to 40bar

PRESSURE RANGE

Negative Pressure (bar)	Positive Pressure (bar)
-1	0.6
-1	1.0
-1	1.5
-1	3.0
-1	4.0
-1	6.0



Bottom Connection



Back Connection