



PANAM[®]
ENGINEERING
BEYOND
LIMITS

Swivel Gauge Adapters

Maximum Working Pressure upto
10000 psig (689 bar)



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Introduction

PANAM[®] has emerged as renowned name in Global market for 'Instrumentation Fittings & Valves'. Since its inception in 1998 to present day, **PANAM**[®] has added new product every year and has broadened its product portfolio and its clientele base by supplying to potential customers worldwide. Key core values like Timely Delivery, Quality Consistency, Product Improvisation and after sales service has been instrumental in the phase wise evolution of company. Continuous improvement is the key to success, Customer feedback are taken with positive attitude and product are constantly groomed to a new quality and performance level to cope up with the competition. Our products are known for providing high-quality, high-reliability, low-cost options for the oil and gas industry. Over the year, the company has evolved from a product based company to a complete system solution provider. Over the coming years the entity of the company will attain state of the art operational efficiency for maintaining a competitive edge, with the advent increase in the utilization of its products in oil, gas and power sector.

PANAM[®] is having state of the art manufacturing facility span over an area of 65,000 sqft with a fleet of CNC machines, VMC machines, Semi-Automatic Lathe machines, High pressure test bench with SCADA control, Configuration centre for transmitters and dedicated R&D Team.

PANAM[®] offers a large variety of Swivel Gauge Adapters from different materials like Stainless Steel and other Alloy (e.g. Monel, Hastalloy, Duplex, Super Duplex etc.) as per the customer's requirements.

PANAM[®] offers Swivel Gauge Adapters with a variety of end connections including NPT Tapered, ISO (BSPT) Tapered, ISO (BSPP) Parallel and Metric Threads. The product meets and even exceeds the requirements of ASME and MSS Series Standards. All materials are supplied in compliance with ASTM Specifications and verified by NABL approved third party laboratories.

PANAM[®] Swivel Gauge Adapters are 100% factory tested and are in compliance with NACE MR0175 / ISO 15156 with Heat Code Traceability and Maximum working pressure upto 10000 psi (689 bar).

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General Information

PANAM[®] Swivel Gauge Adapters are designed to provide 360° rotation of the measurement equipment and to insure the most convenient positioning of the installed sensors, pressure gauges and other measuring instruments. Design of the sealing mechanism ensures that the system is completely sealed at a maximum operating pressure of 10,000 psi (689 bar). Silver-plated, stainless-steel swivel nut threads and sealing area prevent thread galling and provide a trouble-free multiple assembly-disassembly of the connector. The use of swivel gauge adapters is possible with multi-port gauge valves and manifolds to ensure correct positioning of pressure gauges and other measuring instruments.

Features

- Universal design with different sizes and types of threads.
- Wide choice of materials.
- 360° positioning of the pressure gauge facilitates easy readings.
- Silver plated threads and bearing surface of the adapter to prevent threads galling.
- Wide choice of thread types.
- Compact design.
- Leak-free sealing mechanism.
- Heat code traceability.
- EN 10204 Type 3.1B test certificates are supplied with materials
- Also available in materials compliant to NACE MR0175 / ISO 15153

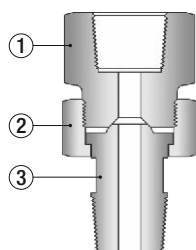
Assembly Instruction

- Mount the adapter on the pipeline from the side of technological connection.
- Connect the pressure gauge with the adapter using wrenches and sealing material for tapered thread or O-rings for cylindrical threads.
- Fix the pressure gauge on the technological connection by installing it in most convenient position for readings.
- Holding a wrench on the connector tighten the union nut.
- The dial of the pressure gauge shall remain in the desired position for easier access to readings.

Technical Characteristics

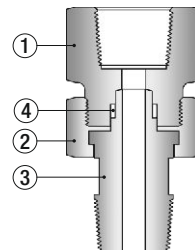
Connection Sizes	1/2" and M20 x 1.5
Types of Thread	NPT, BSPT / ISO Tapered, BSPP / ISO Parallel
Materials	SS 316, SS 316L, Alloy 400 (Monel 400), Alloy 600 (Inconel 600), Alloy 625, Alloy 825, Alloy C-276 (Hastalloy C-276), Duplex S32205, Super Duplex S32750, 6Mo (S31254)
Maximum Working Pressure	6000 psi (414 bar) / 10000 psi (689 bar) Optional
Maximum Working Temperature	538° C (1000° F) without O-ring 538° C (1000° F) with Graphoil O-ring 260° C (500° F) with PTFE O-ring

Materials of Construction



Type M
(without O-ring)

No	Part	Material	Qty.
1	Instrument Connector	ASTM A479-316 SS	1
2	Swivel Nut	ASTM A479-316 SS	1
3	Process Connector	ASTM A479-316 SS	1



Type S
(with O-ring from
PTFE/Graphoil)

No	Part	Material	Qty.
1	Instrument Connector	ASTM A479-316 SS	1
2	Swivel Nut	ASTM A479-316 SS	1
3	Process Connector	ASTM A479-316 SS	1
4	O-ring	PTFE / Graphoil	1

Materials

Material	Class	Designation to ASTM	Equivalent to EN
Stainless Steel	ASTM A479-316 SS	SS	EN 10222-5 Grade 1.4401
	ASTM A479-316 SS	SSL	EN 10222-5 Grade 1.4404
	ASTM A479 S31254 (6Mo)	6Mo	EN 10222-5 Grade 1.4547
Alloys Duplex & Supper	ASTM A479 S32205 (Duplex)	DS	EN 10222-5 Grade 1.4462
	ASTM A479 S32750 (Super Duplex)	SDS	EN 10222-5 Grade 1.4410
Nickel-Based Alloys	ASTM B164 N04400 (Alloy 400 - Monel)	MO	EN 10222-5 Grade 2.4360
	ASTM B166 N06600 (Alloy 600 - Inconel)	INC	EN 10222-5 Grade 2.4816
	ASTM B446 N06625 (Alloy 625)	A625	DIN 17752 Grade 2.4856
	ASTM B425 N08825 (Alloy 825)	A825	DIN 17752 Grade 2.4858
	ASTM B574 N10276 (Hastalloy C-276)	HC	DIN 17752 Grade 2.4819

Types of Threads

Threads	Standard
NPT	ASME B1.20.1
BSPT / ISO Tapered	BS 21, ISO 7/1, EN 10226-1
BSPP / BSP Parallel	BS 2779, ISO 228-1
Metric M20 x 1.5	ASME B1.13M, ISO 261

Types of End Connections

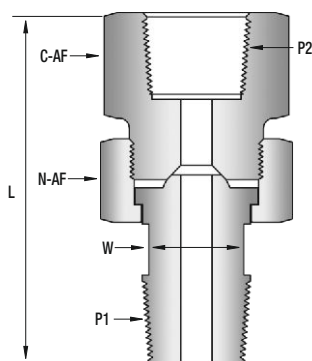
Connection	Type of Threads	Size
Female	Male NPT	1/2"
	Male BSPT / ISO Tapered	
	Male BSPP / ISO Parallel	
Male	Male Metric	M20 x 1.5
	Male NPT	1/2"
	Female NPT	
	Male BSPT / ISO Tapered	
	Female BSPT / ISO Tapered	
	Male BSPP / ISO Parallel	
	Female BSPP / ISO Parallel	
	Male Metric	M20 x 1.5
	Female Metric	

Safety

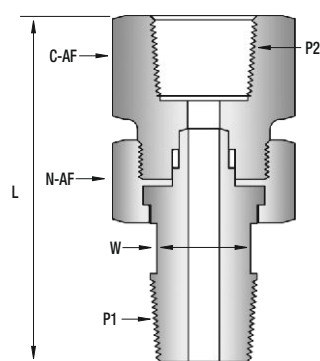
For safe operation of **PANAM**® Swivel Gauge Adapters they shall be adequately selected. When choosing materials operating conditions, compatibility of materials, purpose and product specifications shall be considered. Installation and maintenance of products shall be carried out by qualified personnel. Wrong selection, poor installation or incorrect operation and maintenance may result in accident causing personal injury and result in material damage.

PANAM® provides a guarantee for all manufactured products, however, the company does not bear responsibility for improper selection, installation, operation and technical maintenance of the delivered products.

Types of Connections and Sizes



Type M



Type S

Type	Part Number	P1 (Inlet)	P2 (Outlet)	L	W	N - A/F	C - A/F
Type M Standard Sealing Metal to Metal (Without O-ring)	PSGA-8N-SS	1/2" NPT Male	1/2" NPT Female	69	3/4"	1-1/4"	1-1/4"
	PSGA-8N-SS-MM	1/2" NPT Male	1/2" NPT Male	73	3/4"	1-1/4"	1-1/4"
	PSGA-8G-SS	1/2" BSPP Male	1/2" BSPP Female	73	3/4"	1-1/4"	1-1/4"
	PSGA-8G-SS-MM	1/2" BSPP Male	1/2" BSPP Male	77	3/4"	1-1/4"	1-1/4"
	PSGA-8R-SS	1/2" BSPT Male	1/2" BSPT Female	69	3/4"	1-1/4"	1-1/4"
	PSGA-8R-SS-MM	1/2" BSPT Male	1/2" BSPT Male	73	3/4"	1-1/4"	1-1/4"
	PSGA-M20-SS	M20 x 1.5 Male	M20 x 1.5 Female	73	3/4"	1-1/4"	1-1/4"
	PSGA-M20-SS-MM	M20 x 1.5 Male	M20 x 1.5 Male	77	3/4"	1-1/4"	1-1/4"
Type S Soft Sealing (With PTFE/Graphoil)	PSGA-8N-SS-S	1/2" NPT Male	1/2" NPT Female	69	3/4"	1-1/4"	1-1/4"
	PSGA-8N-SS-S-MM	1/2" NPT Male	1/2" NPT Male	73	3/4"	1-1/4"	1-1/4"
	PSGA-8G-SS-S	1/2" BSPP Male	1/2" BSPP Female	73	3/4"	1-1/4"	1-1/4"
	PSGA-8G-SS-S-MM	1/2" BSPP Male	1/2" BSPP Male	77	3/4"	1-1/4"	1-1/4"
	PSGA-8R-SS-S	1/2" BSPT Male	1/2" BSPT Female	69	3/4"	1-1/4"	1-1/4"
	PSGA-8R-SS-S-MM	1/2" BSPT Male	1/2" BSPT Male	73	3/4"	1-1/4"	1-1/4"
	PSGA-M20-SS-S	M20 x 1.5 Male	M20 x 1.5 Female	73	3/4"	1-1/4"	1-1/4"
	PSGA-M20-SS-S-MM	M20 x 1.5 Male	M20 x 1.5 Male	77	3/4"	1-1/4"	1-1/4"

Note: Sizes are for reference only and can be changed. Other size, types and materials are available upon request.

Ordering Information

Stainless Steel 316 is standard material for Swivel Gauge Adapters. To order a product from a different material, replace "SS" in part number with required designation according to ASTM, indicated in the table "Materials of manufacture" on the previous page (in the table, ASTM designations are in bold). For example, **PSGA-8N-M0**.

For ordering the Swivel Gauge Adapters with a maximum working pressure of 10000 psi (689 bar), add "10K" at the end of the part number. For example, **PSGA-8N-SS-10K**.

Standard seal for swivel S-Type Gauge Adaptors is PTFE. For Graphoil seals for high temperature application, use "HT" at the end of the part number. For example, **PSGA-8N-SS-S-HT**.

Add "SG" to the part number to order NACE MRO175 / ISO 15156 compliant material. For example, **PSGA-8N-SS-10K-SG**.

Continuous product improvement can lead to changes in this catalogue. **PANAM®** reserves the right to make such changes at its discretion and without prior notifications.

Other Products



2-3-5 VALVE MANIFOLDS



BELLOW SEAL VALVES



GAUGE ROOT VALVES



NEEDLE VALVES



HP NEEDLE VALVES



BALL VALVES



HP BALL VALVES



DOUBLE BLOCK & BLEED VALVES



MONO FLANGE VALVES



CHECK VALVES



RELIEF VALVES



FILTERS



TUBE FITTINGS



PIPE FITTINGS



HP PIPE FITTINGS



SWIVEL FITTINGS



JIC FITTINGS



WELD FITTINGS



HIGH PRESSURE FITTINGS



GAUGE SAVERS



PRESSURE GAUGES



TEMPERATURE GAUGES



PRESSURE TRANSMITTERS



TEMPERATURE TRANSMITTERS



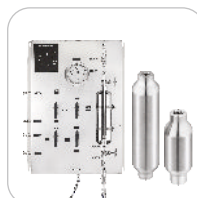
PRESSURE REGULATORS



CONDENSATE POTS



AIR HEADERS



GRAB SAMPLING SYSTEM



PRE-FABRICATED HOOK UPS



FLANGE ADAPTERS



SWIVEL GAUGE ADAPTERS



THERMOWELLS



BLEED PLUGS



DIE-ELECTRIC FITTINGS



TUBING



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