

HIPPS – SIL 4 Modular Manifold

*High Integrity Pressure Protection System

Indra "IM" Modular Manifold are specifically designed for HIPPS* applications and "Safety Instrumented Systems".

The main function of the Modular Manifold is to permanently ensure the continuity of information between the process fluid and the pressure sensors.

The Modular Manifold design forces the user to follow a predefined set of sequential operations, that are never super-imposable.

The function of the Modular Manifold is developed through a variety of configurations identified as 1002-2003-1004 (see flow charts on the following pages). The standard construction of Modular Manifold doesn't include the use of optional boxes, however on request the Modular Manifold can be supplied already mounted in a IP65 stainless steel or GRP safety box.

Fig. 1 Modular Manifold in the standard execution. Fig. 2 Modular Manifold with housing and accessories.







Fig. 2



"IM" SIL 4 Modular Manifold





Applications:

Pressure instruments isolation for HIPPS systems & Safety Instrumented System

Connections:

Threaded (ASME B1.20.1) Flanged (ASME B16.5)

Rating:

Max #2500 (420 bar)

Seals: Standard: PTFE Optional: Graphite

Features:

- Cost reduction for the construction of a high-pressure installation
- Protection of the line from overpressure
- · Reduction of pollutant emissions into the atmosphere due to high-pressure lines

Certifications:

SIL 4 - IEC 61508 PED 97/23/CE ATEX 94/9/CE CU-TR IP65 (with box)

Typical reasons for a HIPPS system installation include:

- · Reduction of the equipment pressure rating downstream of the HIPPS itself
- Practical reduction of flare system/piping size **or** to increase process system capacity;
- Compliance with regulations
- Reduction in installed system weight & space
- Environmental factor of reduced emissions (no flaring).
- Increased safety through reduction of the plant risk profile

HIPPS can be used as possible alternative to conventional mechanical protective devices or reduce the load upon them, as example below:

- Full pressure rating of the equipment downstream
- Design the disposal system for simultaneous reliefs
- Aids in adequately sizing mechanical pressure relief devices



Ordering Information



Dimensions are in "mm" for reference only, and may be changed without notice.



EN Enclosure





The standard modular manifold version performs its control functions without the need for any other accessories.

For outdoor installation, it is advisable to use a supplementary box to protect both the manifold itself and the control instrumentation connected to it. This is particularly true in hazardous areas & marine, tropical, or freezing climates.

Optional protective boxes in Stainless Steel and Polyester materials act to guarantee and safeguard the integrity and working efficiency of all components of the system. The boxes have been designed and are available with three different dimensions according to the manifold configuration 1002-2003-1004.

- Box weatherproof degree IP 65
- Hydraulically actioned opening cover
- Without windows
- With plastic windows*
- With safety glass windows*
- With internal insulation
- With accessories for the thermoregulation
- With breathing plugs
- With wiring terminal boxes



Ordering Information







-H	-L -P	Availability				
		Needle Valves	Manifolds	Monoflanges	Ball Valves	
Α	Antitamper Actuator	\sim	 Image: A second s	\sim	\sim	
В	Bolted Bonnet	 Image: A second s		\checkmark	~	
F	Oval Flange		~			
G	Graphite seals	~	~	~	~	
н	Rating 10.000 PSI (²)	 	\checkmark			
K1	Mechanical Electrical Contact				~	
K2	Magnetic Electrical Contact				~	
KG	Graphite bonnet seals replacement kit	~	\checkmark	~	~	
кт	PTFE bonnet seals replacement kit	~	~	~	~	
L	Locking Device	~		~	~	
0	Oxygen Service	~	\checkmark	~	~	
Р	Padlock	 		~	~	
Q	Quick Locking Device	~	\checkmark	~	~	
R	Swivelling Fitting	 		~	\checkmark	
Y	Bonnet O.S.&Y.	 Image: A second s		~	~	
TV	Painting Treatment	 	~	\sim	\checkmark	
TF	Phosphatization Treatment (1)	 Image: A second s	\checkmark	\checkmark	 	
TZ	Zinc Plating Treatment (1)	 Image: A second s	\checkmark	~	~	
U45-V	7/16" UNF L=45 mm screws and nuts kit (2 screws - 2 nuts) for 2 valves manifold		~			
U75-2V	7/16" UNF L=75 mm screws and nuts kit (2 screws - 2 nuts) for 2 valves manifold		~			
U45-3/5V	7/16" UNF L=45 mm screws and nuts kit (4 screws - 4 nuts) for 3 and 5 valves manifold		~			
U75-3/5V	7/16" UNF L=75 mm screws and nuts kit (4 screws - 4 nuts) for 3 and 5 valves manifold		\checkmark			
W	2" Pipe bracket		\checkmark			
AT	Atex Version	 Image: A second s	\checkmark	 	~	
GR	Gost R Version	~	~	~	~	
FS	Fire Safe Version	 Image: A second s	~	~	~	
TA	Fugitive Emission TA-LUFT Version	 Image: A second s	\checkmark	~	 Image: A second s	
CRN	CURRENT CRN COMPLIANCE FOR 10 CANADIAN PROVINCES	~	~	~	~	

(1) For carbon steel versions only.

(2) For flanged, BW, SW versions operating limits as for reference rules.

X = NOT CODED OPTION

For DB, SBB, DBB valves, repeat option code as many times as requested. If you don't find options you need, please feel free to contact our sales Department Ex: mod. 739R-DD-S-T-A-A = 2 Block + 1 Bleed bonnet Anti-tamper



Ы	-L -P	Availability				
-11		Needle Valves	Manifolds	Monoflanges	Ball Valves	
IDX	Vent Bottom Right		 Image: A second s			
ISX	Vent Bottom Left		 	 Image: A second s	\checkmark	
М	Monel Trim	 	 	 	~	
SPC 1	Special Marking - See descriptor	 Image: A second s	 	\sim	 	
DIN 7756	Inlet Special Insert 1/8" NPT-M x DIN 7756 VG 8	 	~	~	~	
2.0515 /DN15	Special DN15 marking requirement	 	~	~	~	
3-G-GR -CUTR	GOST & CU-TR Certificate	~	~	~	~	
х	Not Coded Option	~	~	~	~	
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