

## GAS MANIFOLD & AUTO-CHANGE OVER

FOR MEDICAL GAS PIPELINE SYSTEM



### AKTIV MANIFOLD CHANGE-OVER SYSTEM

AKTIV AMAZON Series of "Manifold & Change-over System" have been designed to provide reliable uninterrupted supply of medical gases to pipeline network of health care units. The system is also "NFPA 99 Type I" facility compliant.

#### The System consists of:

- Two Manifold Headers (Left Bank & Right Bank of cylinders) with option of Special header configurations available upon request. (U- shaped, L- shaped, etc. where dimensional sketch of installation required).
- Option of gas specific Copper pigtail or SS braided high pressure flexible Tail Pipe (ISO 21969:2009) for connecting compressed gas cylinders to Manifold through HP non-return valve to form a gas bank.
- Change-over unit with choice of Automatic or Semi-automatic bank switching facility.
- Relief valve to bleed pressure build-up in excess of 5.2 bar (75 psi) for safety.

Upstream pressure stability in compliance with BS EN ISO 7396-1: 2016 is ensured through control of high pressure (ISO 10524 - 2 : 2006) and low pressure (ISO 10524 - 4 : 2008) reduction in series and elimination of diaphragm on the high pressure side make the Change Over, a reliable trouble free unit.

Aktiv "Manifold & Change-Over System" have three models of Change-over unit for integration with manifolds i.e. fully automatic switching mode (Amazon & Amazon-D) where no manual intervention is required other than replacement of empty cylinders while in semi-automatic system Amazon-SA, the switching is automatic from servicing bank to reserve bank but manual setting is necessary for next switching. The change over from depleted bank to reserve bank is automatically accomplished by pneumatic switching for uninterrupted supply to the medical gas network and not dependent on the external power source.

All AMAZON change over units are provided with integrated analogue and LED display for monitoring bank status (pressure level of each source) and discharge pressure status (line pressure level). A safe 230 V AC / 12 V DC external adapter is part of the system for audio visual status.

Aktiv "Manifold & Change Over System" can be opted for flexible installation while integrating the manifold header with the change over unit through SS Braided High Pressure Tail Pipe conforming to ISO 21969:2009, thus rigid alignment requirement while installing the system could be avoided. High Pressure Header Isolation valve can also be integrated in the system if required. Connection to cylinder end of pigtail / tailpipe to suit different standard cylinder valve are also available on request.

The system is available with three types of Change-over :-

- AMAZON - D : Fully Automatic Change-over with Digital Display
- AMAZON : Fully Automatic Change-over with LED Indicators & Analogue Pressure Gauge
- AMAZON - SA : Semi-automatic Change-over with LED Indicators & Analogue Pressure Gauge.

## Technical & Ordering information

Gas Service	Inlet Pressure Bar (Max) psi		Outlet Pressure Bar (Static) psi		Max flow Liter / min	Ordering Code (Change-over Unit only)		
						AMAZON - D	AMAZON	AMAZON - SA
Oxygen	150	2175	4.12	60	1000*	6173110	6171110	6172110
Oxygen	150	2175	4.12	60	2000	On request	On request	On request
Nitrous Oxide	110	1600	4.12	60	1200	6173210	6171210	6172210
Carbon Dioxide	110	1600	4.12	60	1200	6173310	6171310	6172310
Surgical Air (AR 7)	150	2175	7	102	1250	On request	On request	On request

\*AMAZON-D Max Flow 1320 Liter Per Min.



Manifold connected to Change-over unit



AMAZON SA  
Semi-Automatic Change-over unit

Manifolds are modular in design and flexible to take care of future requirement by adding header extensions to the existing unit.  
All connections to cylinder valves are through filter and "HP NRV" to protect the change over unit for safe operation and gas loss in the event of fractured pigtail / tailpipe.  
Aktiv also manufacture Customized emergency standby manifold which are operated manually to provide back-up supply during maintenance or failure of the main supply system.

**DISCLAIMER:** Aktiv Amazon Manifold Change Over System meet and exceed the requirements of relevant standard at the time of manufacture. However, source, capacity, sizing and restrictions may prevent from attaining the stipulated value.



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