



MAKERS OF RESPIRATORY VALVES SINCE 1938
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Product Description

Two-Way Non-Rebreathing Valves have three ports identified as Inhalation, Exhalation and Mouth port. The Inhalation and Exhalation ports have one-way Spiral-Type™ Diaphragms to control the direction of air flow through the valve. A spontaneous breathing patient connected to the Mouth port will breathe in through the Inhalation port and breathe out through the Exhalation port as controlled by the placement of the one-way diaphragms. The Spiral-Type™ diaphragms are designed by Hans Rudolph specifically for low pressure respiratory breathing circuits. Sizes are selected based on the parameters of flow range, resistance to flow, rebreathing volume dead space and physical size.

Product Features

- Functions in any position – not gravity dependent
- Low resistance to flow – very sensitive to low flows
- Non-Sticking Diaphragm design – helical spring legs with knife-edge sealing ring (seat)
- Transparent Outlet and Main Body for visibility of Diaphragm function
- Threaded connections for convenient disassembly and part replacement
- Several standard sizes to cover wide range of applications
- 22 and 15 mm tapered port sizes comply with EN ISO 5356-1:2004
- Engineered thermoplastics are durable and precisely injection molded and machined
- Special sizes and materials available per request

SPECIFICATIONS MATERIALS (see Fig. A & B)

ITEM	DESCRIPTION	MATERIAL(S)
1	Inlet or Inhalation Port	PET, POM
2	Outlet or Exhalation Port	PA, Copolyester
3	Common or Mouth Port	PET, POM
4	Housing or Valve Body	PA, Copolyester
5	Spiral Diaphragm	Silicone Rubber
6	Diaphragm Ring or Seat	POM
7	Diaphragm Stop	SST

General Information

Intended Use and Patient Population

Two-Way Non-Rebreathing Valves are intended for use as a component of a respiratory circuit for spontaneously breathing patients to enable two-way non-rebreathing. The direction of flow through the valve is indicated with arrows marked on the valve body. These valves are indicated for use in pulmonary function testing, exercise testing, and respiratory research and custom applications involving adults and pediatric patients. These Valves are not intended for use in any type of therapeutic application, especially those involving critical care or life support, ventilation or anesthesia.

Refer to Instructions for Use 691200 shipped with the product for cleaning, disinfection and maintenance of these valves.

These Products are packaged and shipped clean, non-sterile

Caution

1. Federal (USA) law restricts these devices to sale by or on the order of a physician
2. Do not ethylene oxide, steam sterilize or pasteurize these valves

Warnings & Risks

refer to the Instructions for Use 691200 shipped with the product

Ambient Conditions

- Temperature: 5°C to 40°C
- Relative Humidity: 0% to 95% (non-condensing)

Data Sheet...

TWO-WAY NON-REBREATHING VALVES

T-Shape Configurations

Series 1410 Small, 2600 Medium, 2700 Large

Y-Shape Configurations

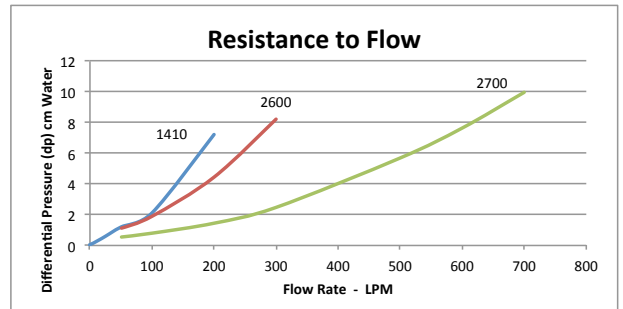
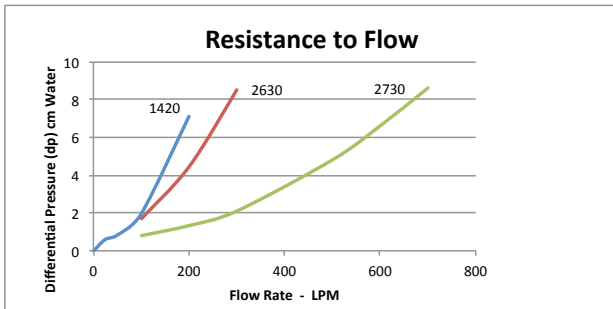
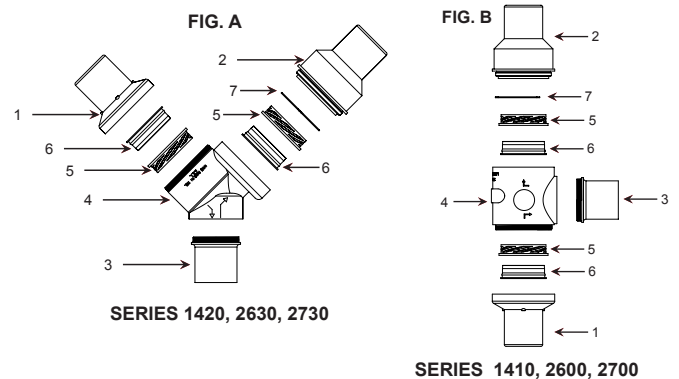
Series 1420 Small, 2630 Medium, 2730 Large



Two-Way T-Shape Non-Rebreathing Valves



Two-Way Y-Shape Non-Rebreathing Valves



		Series / Part Number													
		1410		2600			2700		1420		2630			2730	
Physicals	UM	112626	112622	112078	112421	112719	112079	112716	112630	112632	112418	112416	112720	112414	112721
Inhalation Exhalation OD/ID	mm	22/15	25.4/22	35/28.6	35/28.6	35/28.6	35/28.6	35/28.6	22/15	25.4/22	35/28.6	35/28.6	35/28.6	35/28.6	35/28.6
Mouth Port OD/ID	mm	22/15	25.4/22	35/28.6	28.6/22	22/19	35/28.6	28.6/22	22/15	25.4/22	35/28.6	28.6/22	22/19	35/28.6	28.6/22
Weight	gm	49	41	92	92	92	131	131	60	51	107	106	101	206	206
Overall Dimensions (W x H x D)	mm	100/57/37	97/57/37	129/73/44	129/76/44	129/75/44	160/91/61	160/91/61	93/33/82	93/33/82	118/41/106	118/41/109	118/41/108	147/56/131	147/56/130
Dead Space Mouth Port	ml	5.6	9.1	21	15	11.1	25.6	16.7	5.5	9.3	21.1	15	11.1	25.6	16.7
Dead Space Housing	ml	10.2	10.2	27.9	27.9	27.9	77.3	77.3	12.2	12.2	24.5	24.5	24.5	74.9	74.9

Port Sizes 15, 22 are tapered diameters. All other sizes are straight diameters.
Total Dead Space add Mouth Port and Housing

ACCESSORIES (refer to Data Sheets listed and Detailed Price List)		
TYPE	DESCRIPTION	DATA SHEETS (Ref DS document number)
Valve Supports	Headgear system adjustable that supports and positions the 2 Way NR Valve for patient breathing	691091
Mask Face Pieces	7450 series Oro-Nasal mask, 8900 series Oro-Nasal, 6450 series Oro-Nasal – Silicone Rubber and TPE versions	7450 691267 & 691310, 8900 691148 & 691149, 6450 691303 & 691314
Sampling Ports	Hose Barbs, Luers, Couplers, sizes & material options, install locations per customer request	691062
Mouthpieces	Mouthpieces Standard & Saliva Trap types, Silicone Rubber	691062
Connectors	Medical Tapered (MT), O-Ring Slip Fit (ORG), Shaped series (SHP), Coupler Lock-Ring, Low Dead Space Adapters	MT 691012, ORG 691015, SHP 691127
Saliva Collectors	Valve Body Style (BS), Mouth Port Style (MS) & Mouthpiece type (MPC)	BS & MS 691025, MPC 691062

There are no Data Sheets for the Coupler Lock-Ring and Low Dead Space Adapter type connectors other than some listings in the Detailed Price List enquire with Hans Rudolph for further information.



Valve Supports



Face Piece



Sampling Ports



Mouth Pieces



Connectors



Saliva Collectors

Ordering Information

SIZE	SERIES	Fig	Part Number (REF)	Inhalation/Exhalation OD/ID (mm)	Mouth Port OD/ID (mm)
Small	1410	B	112626	22/15	22/15
			112622	25.4/22	25.4/22
Medium	2600	B	112078	35/28.6	35/28.6
			112421	35/28.6	28.6/22
			112719	35/28.6	22/19
Large	2700	B	112079	35/28.6	35/28.6
			112716	35/28.6	28.6/22
Small	1420	A	112630	22/15	22/15
			112632	25.4/22	25.4/22
Medium	2630	A	112418	35/28.6	35/28.6
			112416	35/28.6	28.6/22
			112720	35/28.6	22/19
Large	2730	A	112414	35/28.6	35/28.6
			112721	35/28.6	28.6/22

Replacement Parts

	Series / Part Number													
	1410		2600			2700		1420		2630			2730	
ITEM	112626	112622	112078	112421	112719	112079	112716	112630	112632	112418	112416	112720	112414	112721
Diaphragm	602024		602021			602022		602024		602021			602022	
Diaphragm Ring (Seat)	611809		611009			611010		611809		611009			611010	
Diaphragm Stop	835900		835901			835902		835900		835901			835902	