

# MAKERS OF RESPIRATORY VALVES SINCE 1938 HANS RUDOLPH, inc.

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8325 COLE PARKWAY, SHAWNEE, KANSAS 66227 U.S.A.

# Data Sheet

# 7900 SERIES MOUTH BREATHING ONLY

PEDIATRIC & ADULT SIZES (5 Sizes)

# 8900 SERIES NASAL & MOUTH BREATHING

PREMATURE THROUGH ADULT (8 Sizes)

# **SILICONE RUBBER FACE MASKS**



**Custom Adapters** 

#### **Product Description**

Hans Rudolph manufacturers two series of silicone rubber face masks that are designed specifically for custom applications utilizing customer supplied devices that connect to the face mask. The two series are the 7900 series Mouth Breathing only type and the 8900 series Nasal & Mouth Breathing type. The 7900 series is available in 5 sizes pediatric through adult and the 8900 series in 8 sizes premature infant through adult. Custom adapters are engineered and manufactured at Hans Rudolph specifically for each device application. Typical applications are for respiratory research breathing circuits attaching flow sensors, non-rebreathing valves, special connectors, tubing and other special device requirements. Several sizes of head gear available ensure a secure fit of the face mask on the subject.

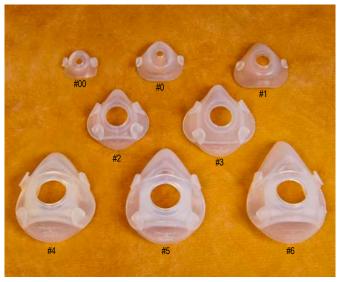
## **Product Features**

- Face masks are molded of silicone rubber material for a skin safe, biocompatible, resilient, comfortable, superior sealing interface
- Mouth breathing only 7900 series is designed specifically for low volume dead space applications to minimize rebreathing
- Eight sizes of the 8900 series Nasal & Mouth breathing face masks premature infant through adult
- Five sizes of the 7900 series Mouth breathing only face masks pediatric through adult
- Face masks incorporate a chin cup which prevents the mask from slipping up on the face especially when perspiring during exercise testing
- · Four integral head gear attachment buttons molded in the face mask for a secure mask fit
- Head gear fabricated of a polyester net cap and adjustable elastic straps with locking two
  piece quick release plastic clips for mask attachment and ease of use securing the mask fit
  during rigorous testing
- Custom mask adapters designed and manufactured per customer request are typically
  machined of a variety of biocompatible thermoplastics selection based on the end user
  requirements

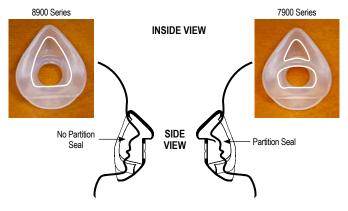
## **General Information**

#### Intended Use

The 7900 & 8900 series face masks are reusable, multi-patient, multi-use masks intended for use with two-way non-rebreathing valves or other mask adapters for connection with flow measuring instruments and other devices used in lung function testing with spontaneously breathing subjects in hospitals and other clinical settings by individuals that have at least minimal training or instructions on the use of the mask as well as the devices to which the mask is intended to connect. Applications are for pulmonary function testing, exercise testing and respiratory research. The masks, adapters and head gear are supplied clean, non-sterile.



Premature #00, Neonatal #0, Infant #1, Pediatric Small #2, Pediatric Large #3,, Adult Small #4, Adult Medium #5, Adult Large #6



# Rebreathing Volume Dead Space

Includes the internal air volume of the mask after installation on the subject plus the volume of the mask adapter and any other attached valve as part of the total rebreathing volume. Estimations of the dead space for each face mask in these series are listed in the Physical Characteristics section of this data sheet.

#### Cleaning and Disinfection

- These products are packaged and shipped clean, non-sterile
- For cleaning and disinfection care refer to our Instructions for Use 691194.

#### Cautions

- Federal Law restricts this device to sale by or on the order of a physician
- 2. Patients with facial hair, especially beards, may experience mask leakage
- 3. Do not use these masks and valves in a life support system such as a ventilator circuit

## Warnings and Risks

Refer to the Instructions for Use 691194 shipped with the product.

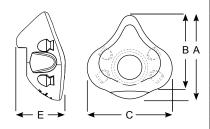
#### **Ambient Conditions**

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



## PHYSICAL CHARACTERISTICS

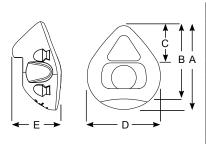
## Rudolph Nasal & Mouth Breathing Mask Face Piece (8900 Series)



DIMENSIONS								
Size	Series	Face Piece P/N	A inch(mm)	B inch(mm)	C inch(mm)	D inch(mm)	**Dead Space ml	Weight gm
Adult Large	8920	669050	5.3 (134.6)	4.8 (122.7)	4.1 (104.1)	3.0 (74.9)	49.1	118
Adult Medium	8930	669051	4.9 (125.2)	4.5 (113.0)	4.1 (104.1)	2.7 (67.3)	46.7	113
Adult Small	8940	669052	4.6 (117.6)	4.0 (101.6)	4.1 (104.1)	2.6 (66.6)	40.2	132
Pediatric Large	8950	669053	4.0 (101.6)	3.5 (88.9)	3.9 (99.1)	1.7 (43.2)	31.5	65
Pediatric Small	8960	669072	3.5 (88.9)	2.9 (73.7)	3.5 (88.9)	1.4 (35.5)	20.0	47
*Infant	8970	669073	2.9 (73.7)	NA	3.1 (78.7)	1.2 (30.5)	14.1	33
*Neonatal	8980	669074	2.5 (63.5)	NA	2.6 (66.0)	1.1 (27.9)	5.2	28
*Premature	8990	669075	1.8 (45.7)	NA	1.8 (45.7)	.8 (20.3)	1.8	11

<sup>\*</sup> Only available in 8900 Series, Nasal & Mouth Breathing Type.

# Rudolph Nasal & Mouth Breathing Mask Face Piece (7900 Series)



DIMENSIONS									
Size	Series	Face Piece P/N	A inch(mm)	B inch(mm)	C inch(mm)	D inch(mm)	E inch(mm)	**Dead Space ml	Weight gm
Adult Large	7920	669040	5.5 (139.7)	4.8 (122.7)	2.4 (61.2)	4.1 (104.1)	3.0 (74.9)	31.3	135
Adult Medium	7930	669041	5.1 (129.5	4.5 (113.0)	2.2 (54.6)	4.2 (106.7)	2.7 (67.3)	27.1	126
Adult Small	7940	669042	4.8 (121.9)	4.2 (117.6)	1.9 (47.5)	4.1 (104.1)	2.6 (66.6)	26.2	125
Pediatric Large	7950	669044	4.0 (101.6)	3.5 (88.9)	1.7 (43.2)	3.9 (99.1)	1.7 (43.2)	23.8	66
Pediatric Small	7970	669071	3.4 (86.4)	3.0 (74.9)	1.4 (35.6)	3.5 (88.9)	1.4 (35.6)	9.3	48
** Rebreathing Volume Dead Space (face piece only).									

#### **GUIDELINES FOR MASK FIT SELECTION**

DIMENSIONS				
Mask Size	Age Fit	Series Model No. (Nasal & Mouth Breathing Type)	Series Model No. (Mouth Breathing Only Type)	
Premature	Less than 38 week Gestation	8990	NA	
Neonatal	Birth to 1 Month	8980	NA	
Infant	1-12 Months	8970	NA	
Pediatric Small	1-5 Years	8960	7970	
Pediatric Large	4-9 Years	8950	7950	
Adult Small	9 Years to Small Adult	8940	7940	
Adult Medium	Large Adolescent to Medium Adult	8930	7930	
Adult Large	Adult Large	8920	7920	

## **HEAD CAP ASSEMBLIES AND HEAD HARNESS**



TOP: Pediatric Large & Small Head Caps, Straps & Locking Type Clips

TOP: Adult Head Cap, Straps & Locking Type Clips

BOTTOM: Infant, Neonatal & Premature Head Harness (Silicone)

## ORDERING INFORMATION

Single Piece Silicone Rubber Face Mask. Adapter & Head Cap Assembly ordered seperately. Two Types Available:

- 1. NASAL & MOUTH BREATHING FACE MASK, 8900 SERIES
- 2. MOUTH BREATHING ONLY FACE MASK, 7900 SERIES

P/N-SERIES	NASAL & MOUTH BREATHING FACE MASK, 8900 SERIES		
669050-8920	Adult Large Face Piece Only		
669051-8930	Adult Medium Face Piece Only		
669052-8940	Adult Small Face Piece Only		
669053-8950	Pediatric Large Face Piece Only		
669072-8960	Pediatric Small Face Piece Only		
669073-8970	Infant Face Piece Only		
669074-8980	Neonatal Face Piece Only		
669075-8990	Premature Face Piece Only		

P/N-SERIES	MOUTH BREATHING ONLY FACE MASK, 7900 SERIES
669040-7920	Adult Large Face Piece Only
669041-7930	Adult Medium Face Piece Only
669042-7940	Adult Small Face Piece Only
669044-7950	Pediatric Large Face Piece Only
669071-7970	Pediatric Small Face Piece Only

# **ACCESSORIES**

**Adapters -** Manufactured Custom per your requirements. User specials and OEM inquires invited.

P/N-SERIES	HEAD CAP ASEEMBLY & HARNESS
200525	Head Cap (Adult Size), Straps & Locking Clips
201079	Head Cap (Pediatric Large Size), Straps & Locking Clips
201133	Head Cap (Pediatric Small Size), Straps & Locking Clips
600077	Head Harness (Infant, Neonatal & Premature Size)

<sup>\*\*</sup> Rebreathing Volume Dead Space (face piece only).