KDRT series

Features

- Service tank is assential at the outlet of compressor for provide air in uniform pressure without pulsation.
- Capacity of tank is determined by the usage of compressor such as capacity, working pressure and etc.
- Tank is corresponding with occupation safety and health acts, user shall use the product after inspection by occupation safety and heatlh admisistration.
- The whole tank's design and performance is after inspection of occupation safety and heatlh admisistration.

How to Order

KDRT - 500-A

① ②

| ① Series	
KDRT	Receiver tank

② Size
500-A, 800-A, 1,000-A, 1,500-A, 2,000-A, 3,000-A, 5,000-A, 8,000-A, 10K, 20K, 30K, 56K

Specifications

Model	Flow Capacity (m^3)	In/Out Connection	Dimensions (mm) D	Dimensions (mm) H	Weight (kg)
KDRT-500-A	0.5	PT 50A	660	1,733	184
KDRT-800-A	0.8	PT 50A	760	2,088	306
KDRT-1,000-A	1.0	PT 50A	850	2,132	392
KDRT-1,500-A	1.5	PT 50A	946	2,486	521
KDRT-2,000-A	2.0	FL 80A	1,110	2,567	764
KDRT-3,000-A	3.0	FL 80A	1,310	2,666	993
KDRT-5,000-A	5.0	FL 100A	1,485	3,361	1,628
KDRT-8,000-A	8.0	FL 125A	1,845	3,539	2,528
KDRT-10K	10.0	FL 150A	2,025	3,648	3,020
KDRT-20K	20.0	FL 200A	2,400	5,200	5,500
KDRT-30K	30.0	FL 250A	2,800	5,950	6,500
KDRT-56K	56.0	FL 350A	2,620	11,232	19,000

☐ Operating pressure: 9.9kgf/cm^2 (Custom made of other specification is available upon customer request)

Dimensions
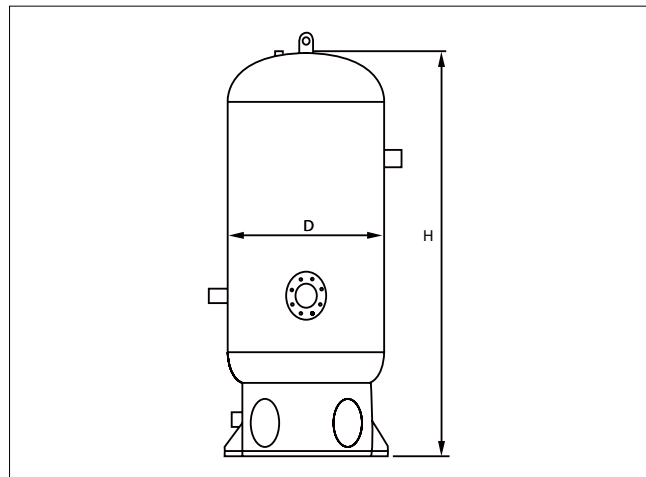
How to Select Receiver Tank

■ Air receiver tank capacity formula

V Volume of the receiver tank (m^3)
t Time allowed for pressure drop to occur (min)
Q_1 Air demand by compressor (m^3)
Q_2 Surplus air volume from compressor (m^3)
P_1 Free air pressure (kgf/cm^2)
P_2 Receiver tank proof pressure (kgf/cm^2)
P_3 Compressor working pressure (kgf/cm^2)

$$V = \{P_1 \times (Q_1 - Q_2) \times t\} / (P_2 - P_3)$$

■ Air discharge by compressor is 550 ℓ/min and the pressure of discharged air is 8.5kgf/cm^2, what is the size of receiver should be selected if the compressor eject 1500ℓ air in 40 seconds?

P_1 1.03323 kgf/cm^2 P_2 9.53323kgf/cm^2(a)
Q_1 1.5m^3 P_3 6.03323kgf/cm^2(a)
Q_2 0.55m^3×40sec/60sec≒0.37m^3 t 0.67min(40sec)

$$V = \{1.0332 \times (1.5 - 0.37) \times 0.67\} / (9.5332 - 6.0332)$$

$$= 0.223(m^3) ≒ 230ℓ = 0.23m^3$$

Install a receiver tank which the volume is greater than 0.23m^3