

REFRIGERANT RECOVERY CYLINDER HANDLING



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Refrigerant Recovery Cylinders

- The user has a legal obligation to ensure the cylinder is not overfilled.
- Always use weigh scales when recovering refrigerant.
- It is for your safety and everyone handling this cylinder.

Maximum Fill Weights



Two cylinder sizes are available i.e. Large, ~45kg maximum fill and Small, ~9kg maximum fill. A maximum fill weight for each cylinder is stencilled on the side of the cylinder as a guide.

The recommended maximum fill weight for recovered refrigerant is 80% of the virgin product quantity embossed on the neck of the cylinder.

Not all cylinders are the same size so take note of the values on the cylinder.



Refrigerant	Maximum Weight	
	12.5 litre	61 litre
R-134a	10.5kg	51.2kg
R-404A	8.2kg	40.0kg
R-407A	9.4kg	45.9kg
R-407C	9.5kg	46.4kg
R-407F	9.2kg	44.9kg
R-410A	8.1kg	39.5kg
R-422A	8.7kg	42.5kg
R-422D	9.2kg	44.9kg
R-448A	8.9kg	43.4kg
R-449A	9.0kg	43.9kg
R-507A	8.0kg	39.0kg

Maximum recovered fill weights for some common refrigerants in a 12.5 litre and a 61 litre cylinder are given as examples in the following table. Use the virgin fill values embossed on the cylinder to calculate the maximum fill weight for the refrigerant being recovered. If the refrigerant is not on the cylinder, do not exceed either 45kg for large cylinders or 9kg for small cylinders.

The tare weight of the empty cylinder can be found stamped on the cylinder.

Flammable A2L refrigerants such as R-1234yf, R-32, R-454A, R-454C, R-455A, R-454B and R-452B must only be recovered into cylinders designated for use with flammable refrigerants. These cylinders will have a painted red top and the correct labelling for flammable refrigerants. The cylinders also have left hand thread DIN 477 connections. Only small (8kg) flammable recovery cylinders are currently available.

If highly flammable hydrocarbon refrigerants (R-290, R-1270, R-600a) are being recovered please ask for advice before ordering the reclaim cylinder.



DO NOT overfill cylinders. Overfilling a cylinder can lead to “hydraulic lock” which is very hazardous and may lead to cylinders rupturing. Collection of overfilled cylinders will be refused on safety grounds. Organising additional transport for rearranging collection of cylinders after an overfill incident, or actions required to rectify the situation where overfilled cylinders are unknowingly transported may result in additional charges being applied.

Typical Recovery Cylinders



Large Cylinder:
Dual Port Liquid &
Vapour outlets, either
5/8" BSP or DIN447-6
valves



Small Cylinder:
1/4" SAE Dual Port
Liquid & Vapour
outlets



A2L Small Cylinder:
Left Hand DIN 477
Dual Port Liquid &
Vapour outlets

Use as a Receiver Cylinder

Where the cylinder is used as a temporary refrigerant storage vessel during maintenance operations, do not use excessive heat e.g. naked flame to warm the cylinder to remove the refrigerant. If the cylinder requires heating to remove refrigerant use an approved cylinder heating device. Do NOT overheat the cylinder (Max 35°C). Cylinders found to have scorch marks will result in additional charges being applied.

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