



# Compressors and Parts



# Unicla

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# Cross Reference Guide

Unicla compressors cover a wide range of mounting applications, with some of the standard Unicla configurations present in the market place for over 40 years (UP/UX/UX/UWX), however with the growing variety of engines and

mounting requirements, this range has expanded significantly as shown in the following guide.

Model	Refrigerant	Oil	Capacity	Mounting
UC45	R134a/513a	PAG56 or POE68	45cc	Unicla's mounting configuration (OEM applications)
UP90	R134a/513a	PAG56 or POE68	90cc	TM8
UP120	R134a/513a	PAG56 or POE68	120cc	TM13, QP13
UPF120	R404a/R452a	POE32	120cc	TM13, QP13
UX120	R134a/513a	PAG56 or POE68	120cc	Unicla's mounting configuration (OEM applications)
UXF120	R404a/R452a	POE32	120cc	Unicla's mounting configuration (OEM applications)
UP150	R134a/513a	PAG56 or POE68	150cc	TM15, TM16, QP15, QP16, SDH715
UPF150	R404a/R452a	POE32	150cc	TM15, TM16, QP15, QP16, SDH715
UX150	R134a/513a	PAG56 or POE68	150cc	Unicla's mounting configuration (OEM applications)
UXF150	R404a/R452a	POE32	150cc	Unicla's mounting configuration (OEM applications)
US150	R134a/513a	PAG56 or POE68	150cc	Sanden direct mount - 8083
UV150	R134a/513a	PAG56 or POE68	150cc	Valeo - DKS15D
UP170	R134a/513a	PAG56 or POE68	170cc	TM15, TM16, QP15, QP16, SDH715
UPF170	R404a/R452a	POE32	170cc	TM15, TM16, QP15, QP16, SDH715
UX170	R134a/513a	PAG56 or POE68	170cc	Unicla's mounting configuration (OEM applications)
UXF170	R404a/R452a	POE32	170cc	Unicla's mounting configuration (OEM applications)
UP200	R134a/513a	PAG56 or POE68	200cc	Unicla's mounting configuration (OEM applications)
UPF200	R404a/R452a	POE32	200cc	Unicla's mounting configuration (OEM applications)
UX200	R134a/513a	PAG56 or POE68	200cc	Unicla's mounting configuration (OEM applications)
UXF200	R404a/R452a	POE32	200cc	Unicla's mounting configuration (OEM applications)
UM200	R134a/513a	PAG56 or POE68	200cc	TM21, QP21
UMF200	R404a/R452a	POE32	200cc	TM21, QP21
UX330	R134a/513a	PAG56 or POE68	200cc	Unicla's mounting configuration (OEM applications)
UXF330	R404a/R452a	POE32	330cc	Unicla's mounting configuration (OEM applications)
UM330	R134a/513a	PAG56 or POE68	330cc	TM31, QP31
UMF330	R404a/R452a	POE32	330cc	TM31, QP31
UN330	R134a/513a	PAG56 or POE68	330cc	Denso 10P30B
UNX330	R134a/513a	PAG56 or POE68	330cc	Denso 10P30C
UX380	R134a/513a	PAG56 or POE68	380cc	Unicla's mounting configuration (OEM applications)
UXF380	R404a/R452a	POE32	380cc	Unicla's mounting configuration (OEM applications)
UM380	R134a/513a	PAG56 or POE68	380cc	TM31, QP31
UMF380	R404a/R452a	POE32	380cc	TM31, QP31
UWX440	R134a/513a	PAG56 or POE68	508cc	Unicla's mounting configuration (OEM applications)
UWFX440	R404a/R452a	POE32	508cc	Unicla's mounting configuration (OEM applications)
UWX550	R134a/513a	PAG56 or POE68	610cc	Unicla's mounting configuration (OEM applications)
UWXF550	R404a/R452a	POE32	610cc	Unicla's mounting configuration (OEM applications)
UWX660	R134a/513a	PAG56 or POE68	675cc	Unicla's mounting configuration (OEM applications)
UWXF660	R404a/R452a	POE32	675cc	Unicla's mounting configuration (OEM applications)



Oil Separators

Features

Unicla series IV oil separators have new and improved design features to further enhance the quality and performance of these popular accessories, which have been part of the Unicla range for many years.

The overall diameter of each model separator has been increased to allow Unicla to mould larger hose fittings into the unit whenever required. Also, enhanced dispersion material is now inserted into the separation chamber to assist with the oil separation process during operation.

Use

Oil separators are recommended in systems where the oil return to the compressor is potentially lower than it should be, at risk from a design feature in the system, or from adverse conditions created by system operation. These can include:

- Very long hose runs (> 6 metres), particularly in the suction line causing pressure drop and reduced refrigerant and oil flow.

- Low evaporator temperatures as found in transport refrigeration systems, causing oil to pool in the evaporator coil
- Large or multiple heat exchangers providing locations for oil to pool, as found in bus and coach rooftop applications
- Air-conditioning systems where the condensing temperature is greater than 50°C and the evaporating temperature is lower than -5°C
- High-revving and continuous compressor operation causing excessive oil discharge from the compressor in relation to oil return.

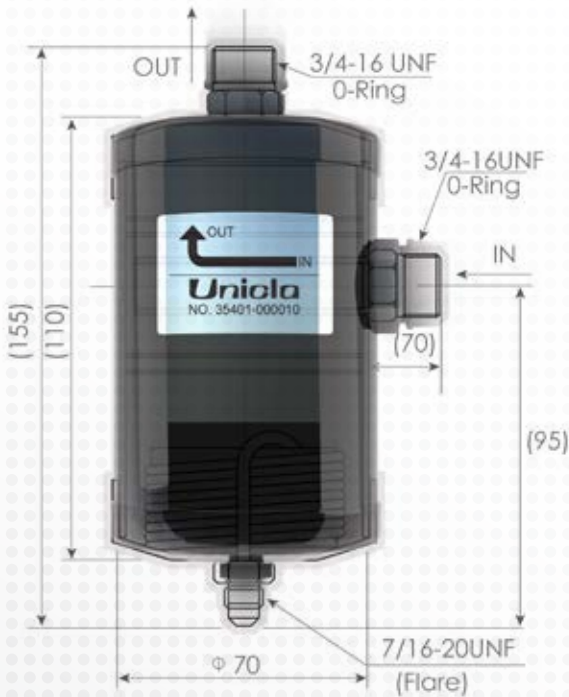
Oil separators are also recommended in systems where evaporator capacity is marginal and oil in the evaporator is affecting system efficiency. Reducing oil in the evaporator improves evaporator saturation temperatures by allowing optimum heat absorption in the refrigerant.

Unicla oil separators will retain >70% of the original compressor oil level (COL) or approximately 40-60% of the recommended total system oil quantity (SOQ).

A-Type Oil Separator

Part No. 35401-000010

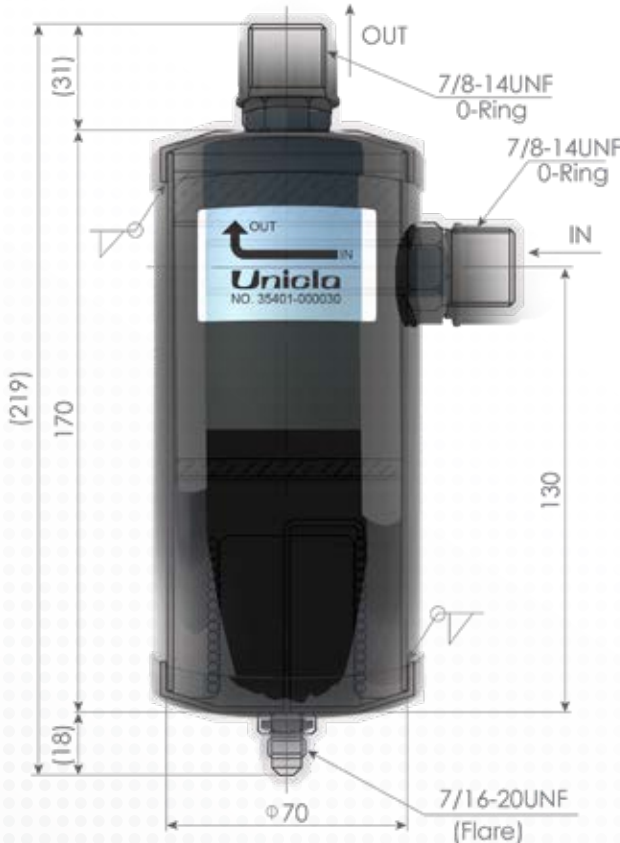
**Male insert O-ring connections (#8: 3/4-16 UNF)** for easy integration in the discharge line, and a **male flare (7/16-20 UNF)** for the oil return line. The A-Type oil separator is ideal for use with all Unicla 45 to 200 series compressors (**45cc to 200 cc**), and has a rated capacity as described in *Table 1*.



B-Type Oil Separator

Part No. 35401-000030

**Male insert O-ring connections (#10: 7/8-14 UNF)** for easy integration in the discharge line, and a **male flare (7/16-20 UNF)** for the oil return line. The B-Type oil separator is ideal for use with all Unicla 300 series compressors (**330 to 380 cc**), and has a rated capacity as described in *Table 1*.



D-Type Oil Separator

Part No. 35401-000050

**Male insert O-ring connections (#12: 1-1/16-14 UNF)** for easy integration in the discharge line, and a **male flare (7/16-20 UNF)** for the oil return line. The D-Type oil separator is ideal for use with all Unicla 330 series compressors (**330 to 380 cc**) where the suction and discharge line length exceeds four metres in length, and has a rated capacity as described in *Table 1*.



F-Type Oil Separator

Part No. 35401-000070

**Male flare connections (#16: 1-5/16-12 UNF-2A)** for easy integration with the discharge line, and a **male flare (7/16-20 UNF)** for the oil return line. The F-Type oil separator is ideal for use with all Unicla UWX series compressors (**508 to 675 cc**), and has a rated capacity as described in *Table 1*.



Pressure			Oil return rate		
MPA	PSI	KPA	A Type	B Type	D/F Type
3	435	3000	40 ml/min	60 ml/min	92 ml/min
2	290	2000	30 ml/min	40 ml/min	64 ml/min
1	143	1000	10 ml/min	13 ml/min	21 ml/min
0.75	108	750	8 ml/min	10 ml/min	16 ml/min

Table 1.

Unicla Universal Oil Separator Brackets

1. **A-Type:** Part No. OSB00010
2. **B-Type:** Part No. OSB00030
3. **D-Type:** Part No. OSB00050
4. **F-Type:** Part No. OSB00070

**NOTE:** All Unicla oil separators are supplied with a bracket





# Fittings, Blanking Plugs and Pressure Switch Fittings

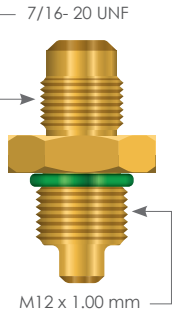
All Unicla compressors (45 to UWX series) have consistent M12 x 1.00 mm access ports at the top, rear and bottom for easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

## Oil Return Fitting

Part No. 42203-000161

**Connection**  
Male flare (7/16- 20 UNF) into compressor port M12 x 1.00 mm

**Application**  
Supplied as standard on all Unicla F model compressors, and 200 to UWX series compressors.

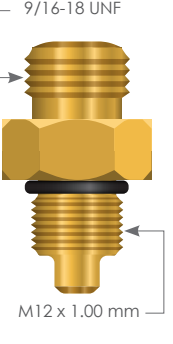


## Oil Return Fitting

Part No. 42203-000240

**Connection**  
Male ORFS (9/16-18 UNF) into compressor port M12 x 1.00 mm

**Application**  
Special oil return fitting (O-ring face seal) commonly found in most leading direct drive transport refrigeration systems such as Carrier Transicold and Thermo King.

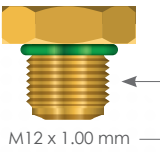


## Blanking Plug

Part No. 13201-000010

**Connection**  
M12 x 1.00 mm.

**Application**  
To blank off any access port.

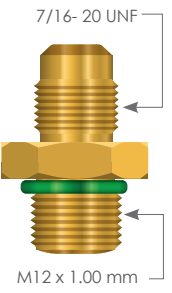


## Pressure Switch Fitting

Part No. 42203-000150

**Connection**  
Male flare with Schrader valve (7/16- 20 UNF) into compressor port M12 x 1.00 mm

**Application**  
Direct installation of a variety of switches to both the low- and high-side access ports.

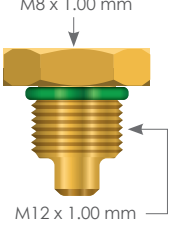


## Oil Return Converter Fitting

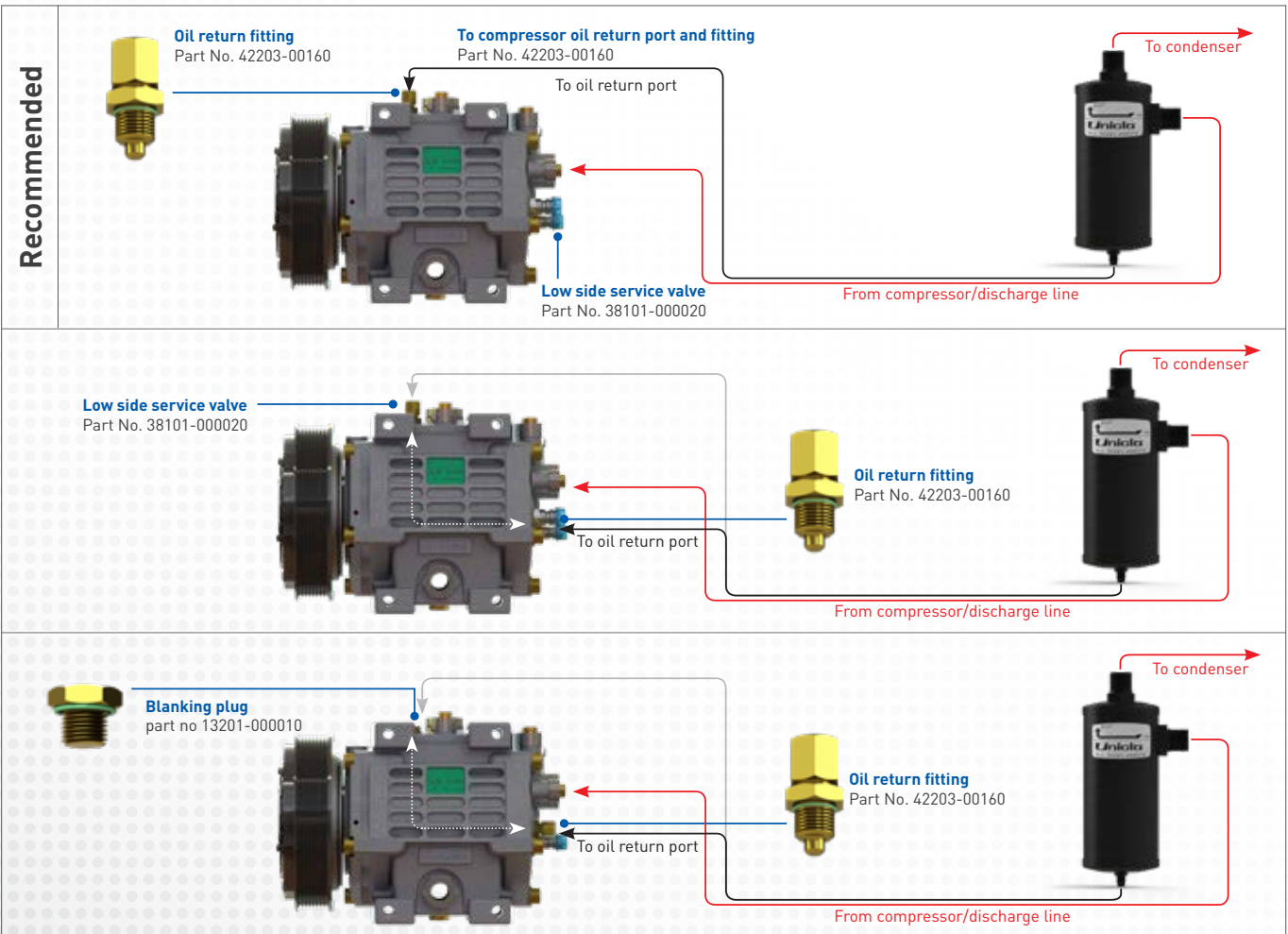
Part No. 42203-000210

**Connection**  
M8 x 1.00 mm into compressor port M12 x 1.00 mm

**Application**  
Converts standard Unicla compressor access port from M12 x 1.0 to M8 x 1.00 mm, which allows use of alternative oil return fittings commonly found on transport refrigeration systems.



## Connection Options for Unicla Oil Separator



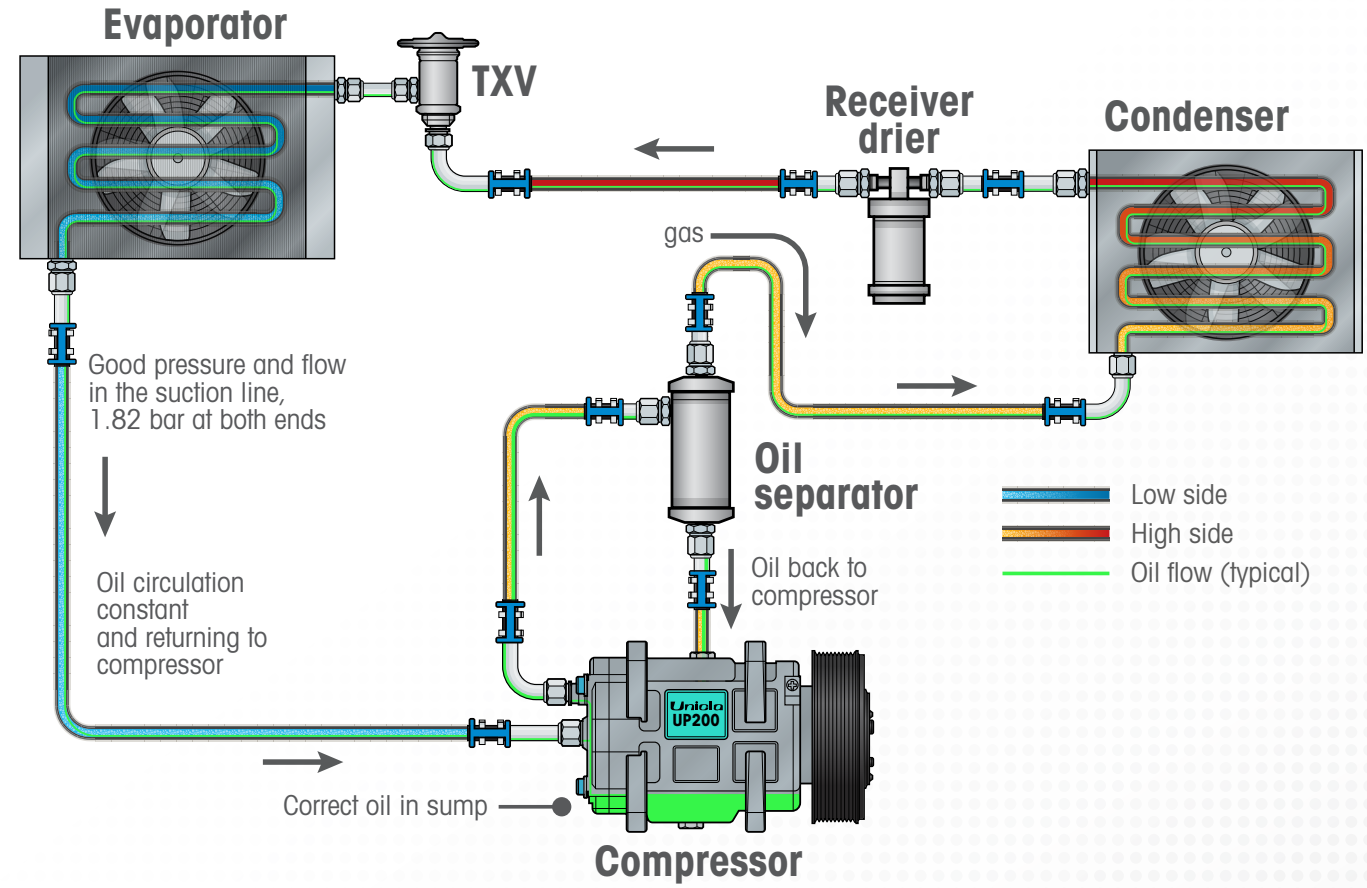
# Recommended Oil

Each Unicla compressor is fitted with specific oil. The above chart outlines the recommended selection of oil and refrigerant for common applications. However, each compressor is labelled separately with the refrigerant and oil type to be used.

Use **ONLY** the recommended refrigerant and oil.

Unicla Oil	Type	Viscosity @ 40°C	Viscosity @ 100°C
Unidap 3	POE32	32.50	5.80
Unidap 6	POE68	65.50	9.30
Unidap 7	PAG56	56.00	10.85
Unidap 8	PAG46	48.01	10.51
Unidap 9	PAG46 HD	46.00	9.70
Unidap 10	PAG100	100.00	21.00

The following diagram shows a Unicla oil separator installed into the circuit with the oil return line connected to the top of the compressor oil return port, and the added benefit where compressor oil level (COL) is increased and oil in circulation (OIC) is reduced.



**Need a reliable oil return line?**

Female Flare 7/16-20 UNF fittings

**Burgaflex** 3390 #4 (1/4") oil return line

Call the team at:  
**Burgaflex**  
ASIA PACIFIC

PH: +61 7 5549 4022 | WEB: www.burgaflex.com

Oil Program and Oil Type

POE 68

TYPE OF OIL  
In this case polyester (POE)

VISCOSITY OF OIL  
Measured at 40°C = 68

PAG 46

TYPE OF OIL  
In this case polyalkylene glycol (PAG)

VISCOSITY OF OIL  
Measured at 40°C = 46

Unidap 3

1 Litre

Unicla Unidap 3	
Type	POE32
Viscosity @ 40°C	32.50
Viscosity @ 100°C	5.80

Unicla Unidap 6	
Type	POE68
Viscosity @ 40°C	65.50
Viscosity @ 100°C	9.30

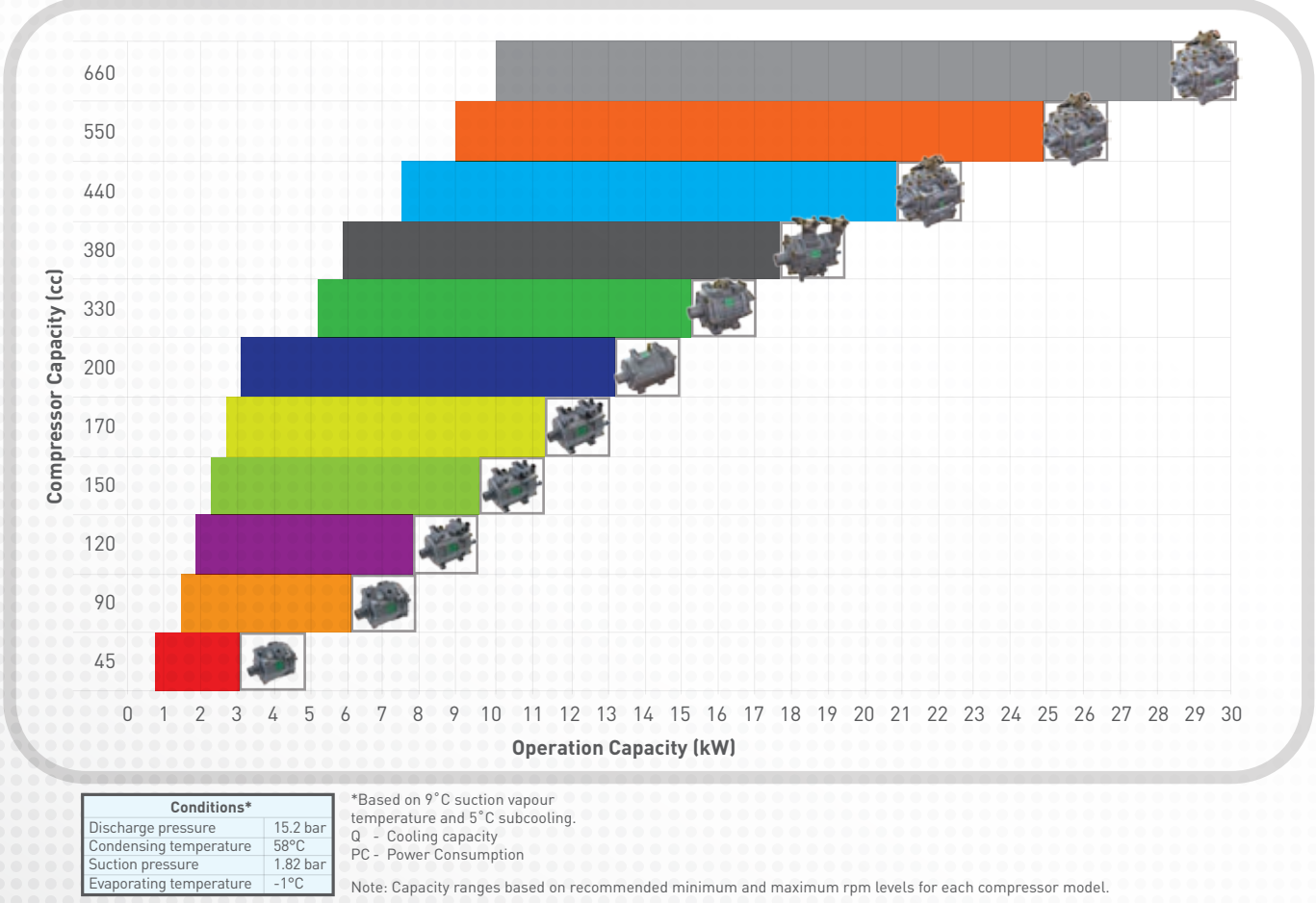
Unicla Unidap 7	
Type	PAG56
Viscosity @ 40°C	56.00
Viscosity @ 100°C	10.85

Unicla Unidap 8	
Type	PAG46
Viscosity @ 40°C	48.01
Viscosity @ 100°C	10.51

Unicla Unidap 9	
Type	PAG46 HD
Viscosity @ 40°C	46.00
Viscosity @ 100°C	9.70

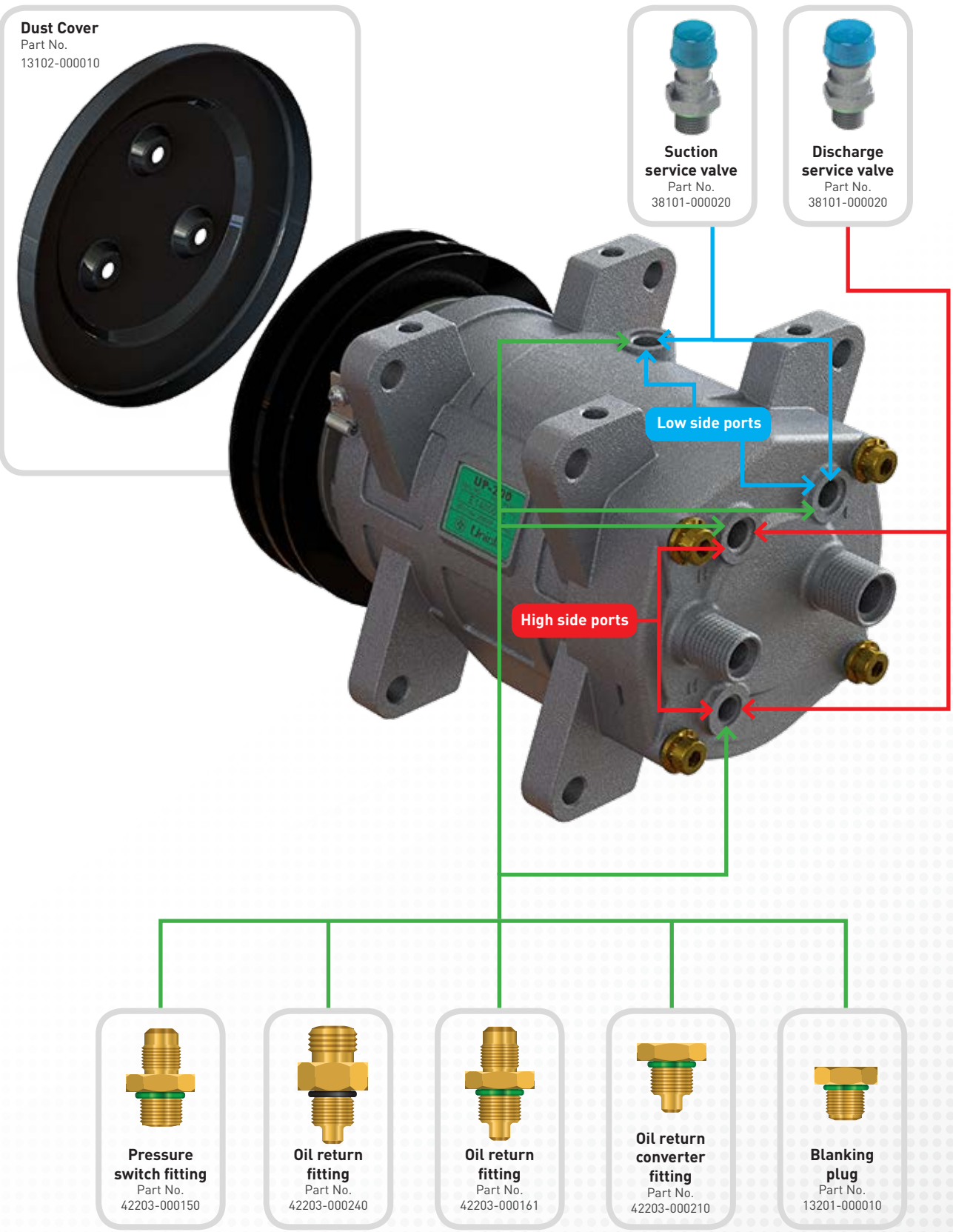
Unicla Unidap 10	
Type	PAG100
Viscosity @ 40°C	100.00
Viscosity @ 100°C	21.00

Compressor Capacities



Customise Your Compressor

Access ports to pressure switch fittings and heavy-duty dust covers.





# A Group

## 45-170 Series Compressors



## A Group 45-170 Series Compressors

### Features

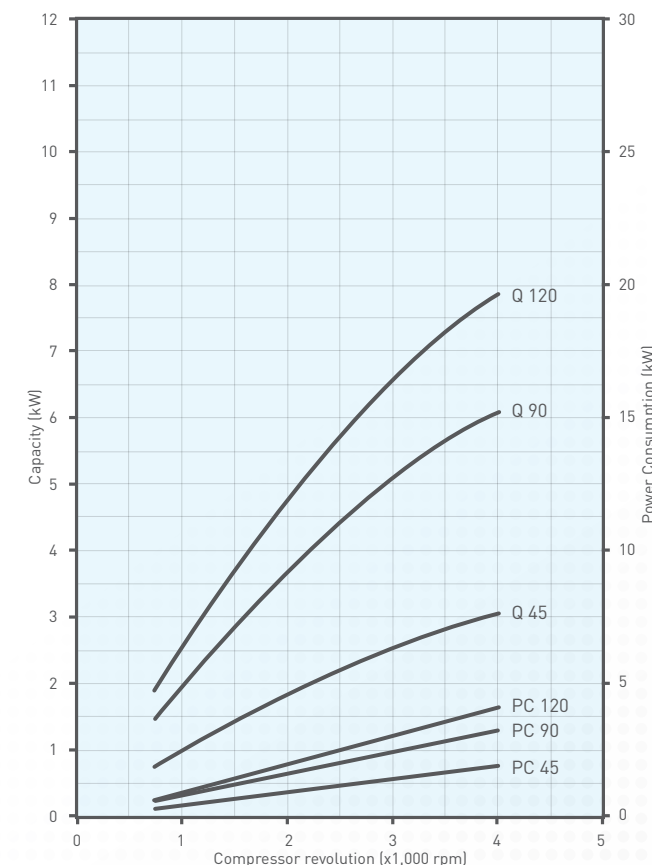
The Unicla 45 to 170 series compressors are an excellent choice for capacity versus overall size for many small- to mid-range single and twin air-conditioning systems, and refrigeration applications where the system capacity requirement is **1- 8 kW**.

Unicla 45 to 170 series compressors provide superior capacity output and are suitable for a wide variety of available engine brackets. All compressors feature the Unicla 10-cylinder swashplate design that delivers extremely quiet and smooth operation, plus high volumetric efficiency through all revolution ranges in both clockwise and counterclockwise rotation.

Refrigerant leakage from compressor body O-rings is eliminated by separately enclosing the entire compressor working assembly in a one-piece crankcase, which also reduces the chance of heat distortion to the outer housing. This results in the compressor maintaining piston alignment and high compression for the duration of its service life, a feature Unicla is well known for.

The UPF, UXF and UPHF model 45 to 170 series compressors have been upgraded internally to suit R404a and R452a low-temperature refrigerants. Features include higher-gauge reed valves, a further refined and polished swashplate and RL32 polyol ester (POE) oil.

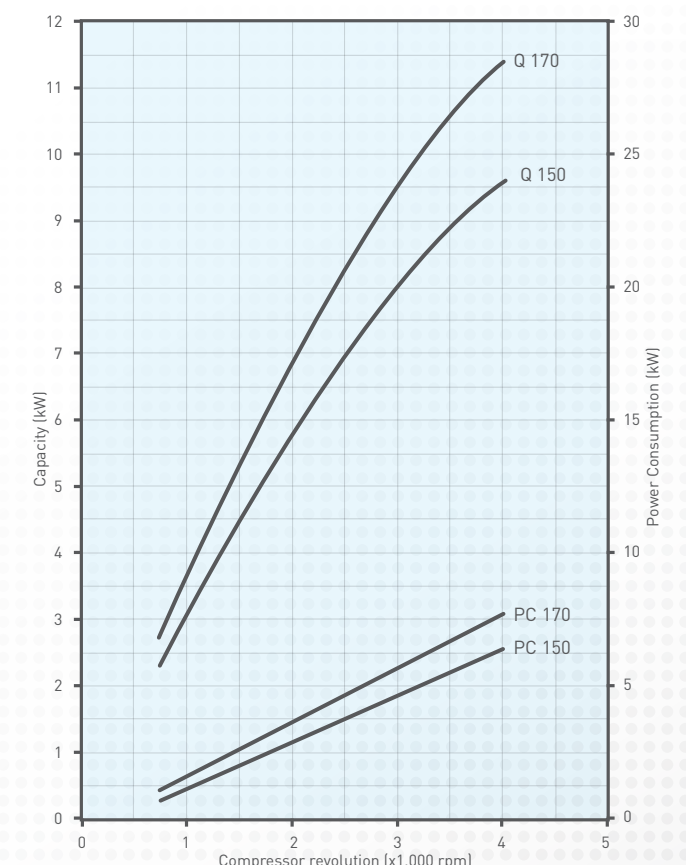
**45-90-120 Series Performance  
- R134a refrigerant**



\*Based on 9°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	1.82 bar
Evaporating temperature	-1°C

**150-170 Series Performance  
- R134a refrigerant**



\*Based on 9°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

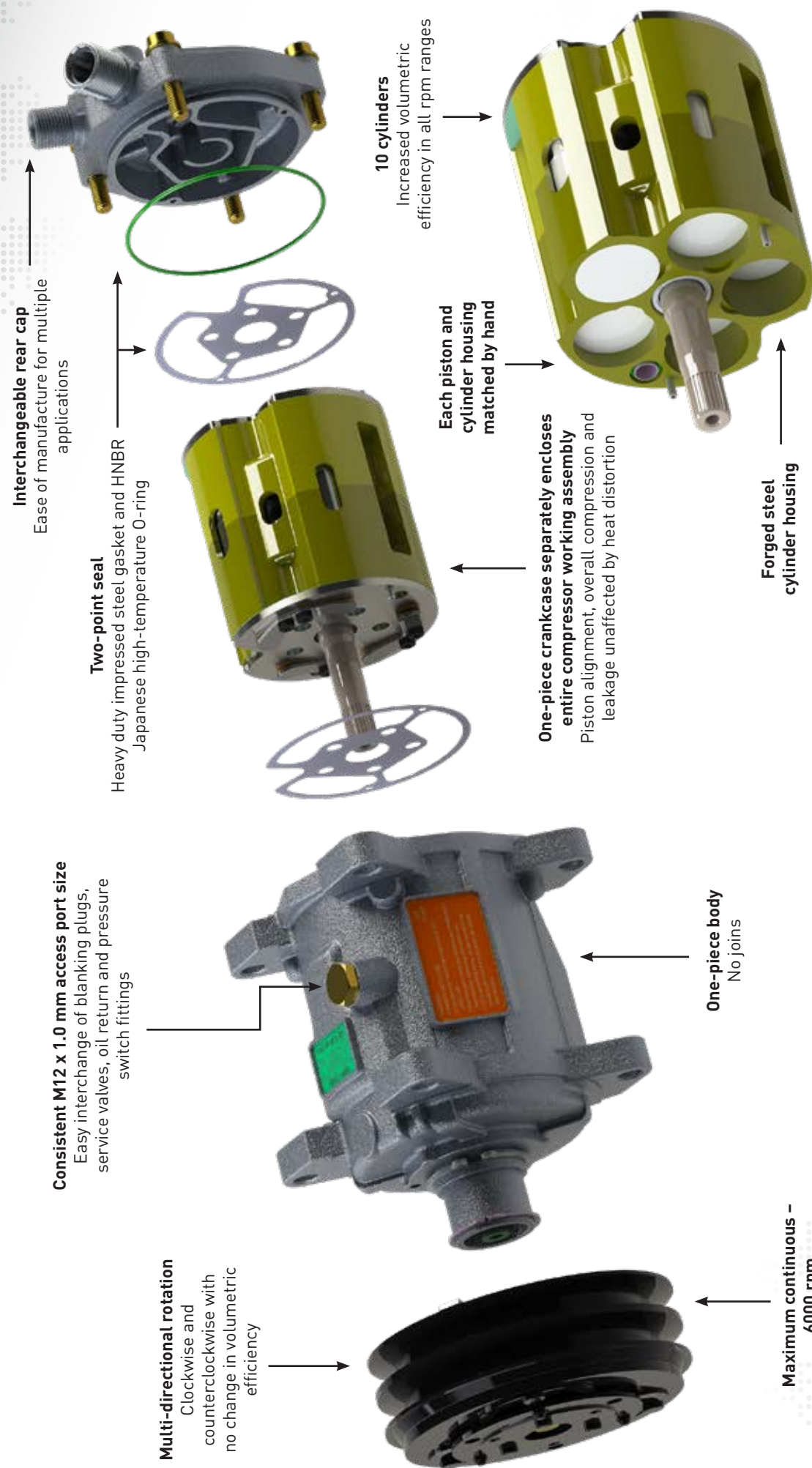
Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	1.82 bar
Evaporating temperature	-1°C





# Unicla

## Advantages 45-170 Series Compressors



## UP170 | UPF170



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **5-8 kW**
- Displacement: **172 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UP and UPF models are compatible with mounting brackets designed for compressors with 83 mm lug spacings and can be interchanged with many compressors used in various applications.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UP models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UPF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

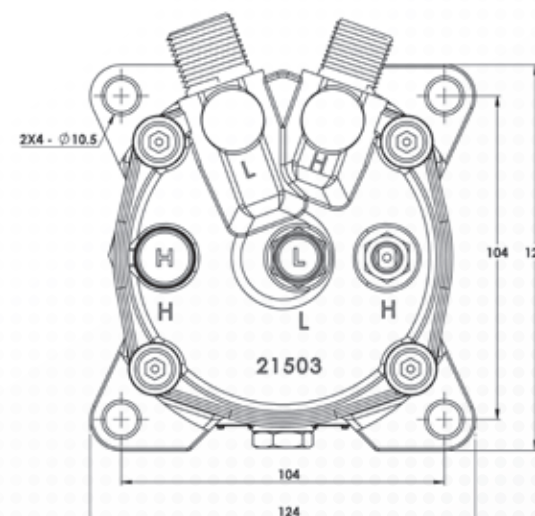
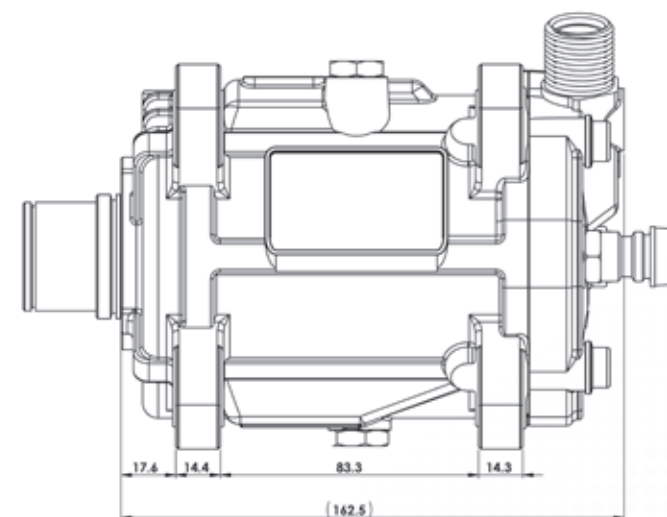
Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

### Clutches

A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.



R134a refrigerant		
Compressor	Oil	Mounting
UP170	PAG56 (160 ml)	TM/QP16/15 & SD7H15 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPF170	POE32 (160 ml)	TM/QP16/15 & SD7H15 compatible



# UX170 | UXF170



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **5-8 kW**
- Displacement: **172 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UX and UXF models are direct mount (bolt-through) and have side mounting points 78 mm apart.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UX models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UXF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

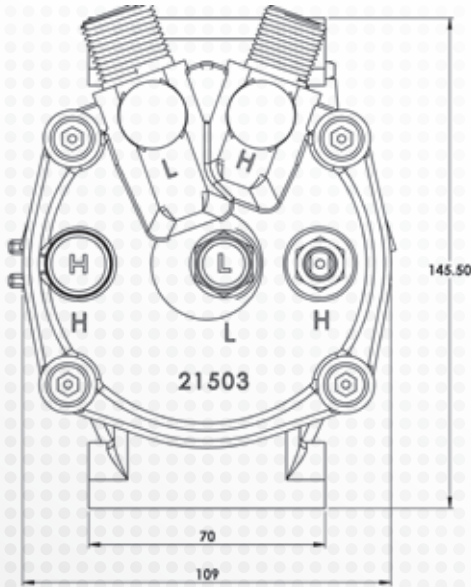
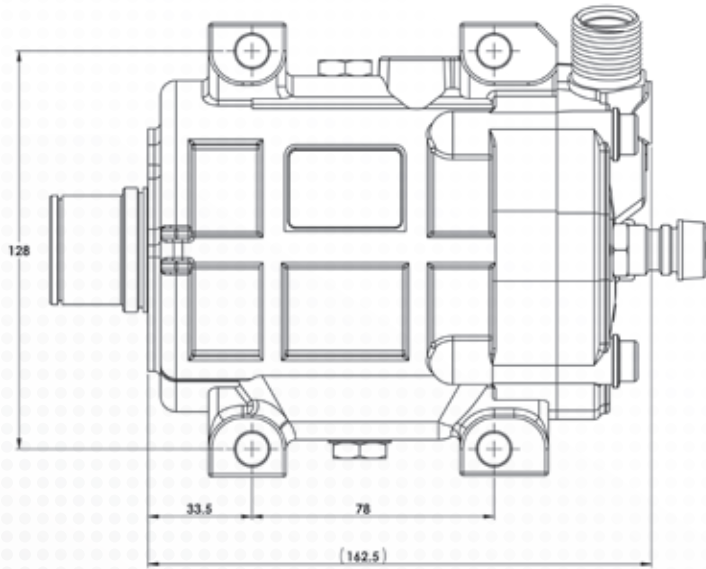
### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

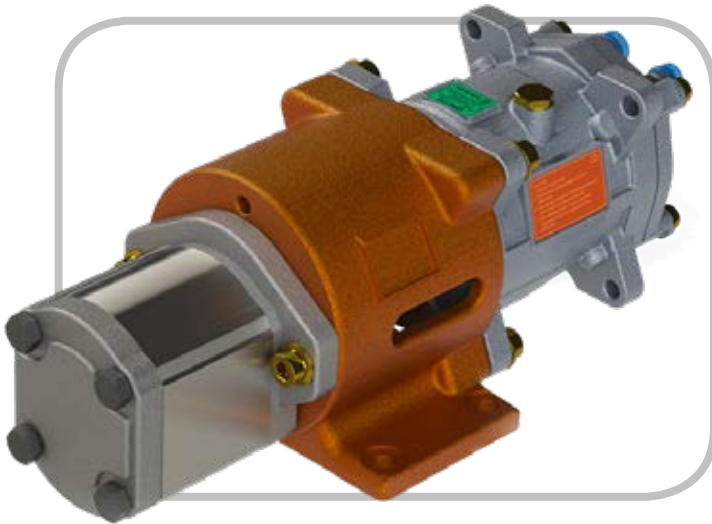
### Clutches

A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.

R134a refrigerant		
Compressor	Oil	Mounting
UX170	PAG56 (160 ml)	Direct mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UXF170	POE32 (160 ml)	Direct mount



# UPH170 | UPHF170



### Features

The Unicla 170 series Hydraulic Drive compressors are universally adaptable and can be driven by any 11-15 cc hydraulic motor with a standard SAE twin-bolt A-type mounting configuration and 5/8" nine-tooth shaft. The unit can be supplied as a complete housing and compressor kit without the hydraulic motor, or the hydraulic drive housing kit on its own without the compressor.

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **5-8 kW**
- Displacement: **172 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UPH and UPHF models are designed to mount to a solid base plate at four points equal to or greater than 180 x 70 mm in diameter.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

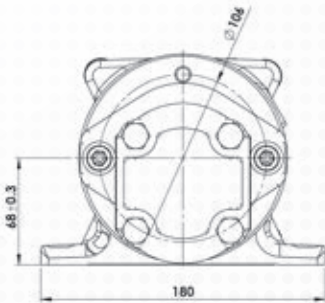
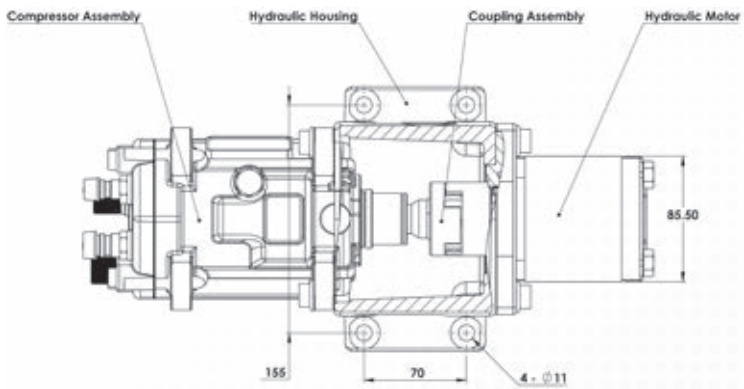
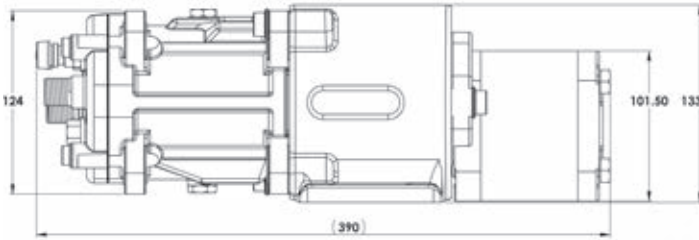
On UPH models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UPHF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.



R134a refrigerant		
Compressor	Oil	Mounting
UPH170	PAG56 (160 ml)	Base mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPHF170	POE32 (160 ml)	Base mount



# UP150 | UPF150



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **4-6 kW**
- Displacement: **145 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UP and UPF models are compatible with mounting brackets designed for compressors with 83 mm lug spacings and can be interchanged with many compressors used in various applications.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UP models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UPF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

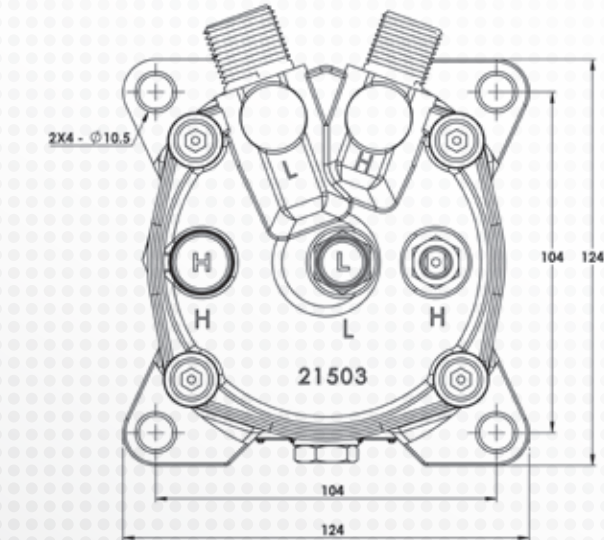
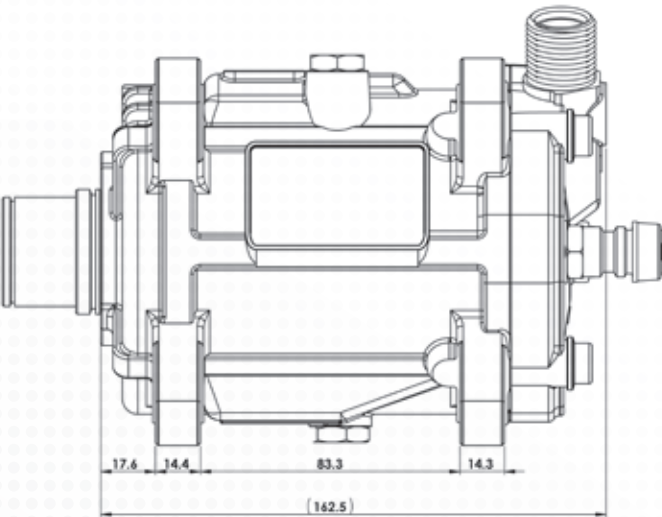
### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

### Clutches

A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.

R134a refrigerant		
Compressor	Oil	Mounting
UP150	PAG56 (160 ml)	TM/QP16/15 & SD7H15 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPF150	POE32 (160 ml)	TM/QP16/15 & SD7H15 compatible



# UX150 | UXF150



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **4-6 kW**
- Displacement: **145 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UX and UXF models are direct mount (bolt-through) and have side mounting points 78 mm apart.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UX models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UXF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

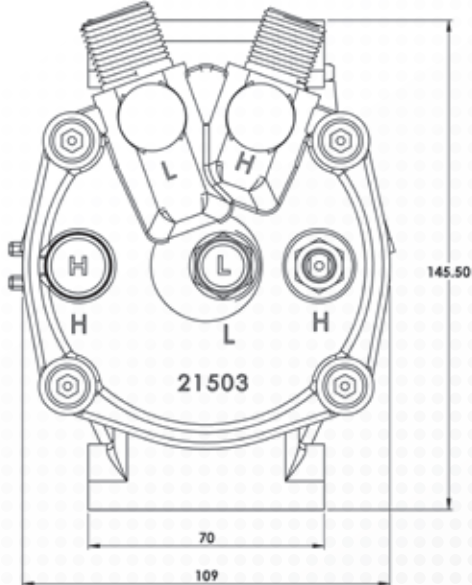
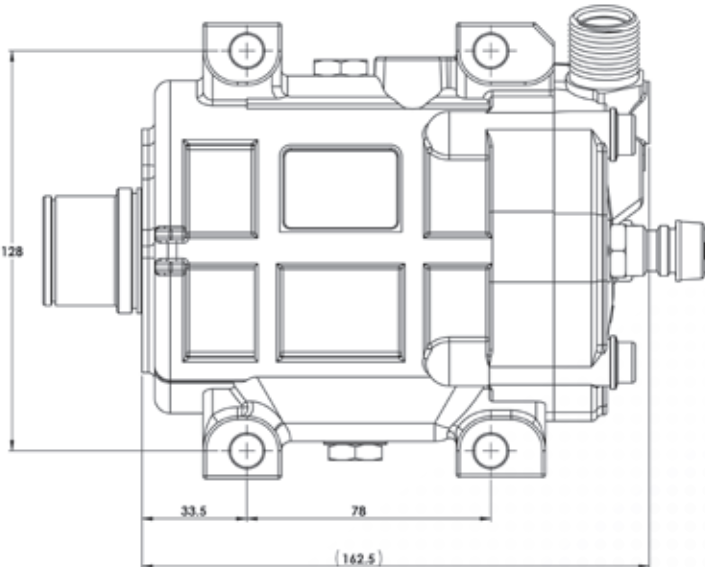
Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

### Clutches

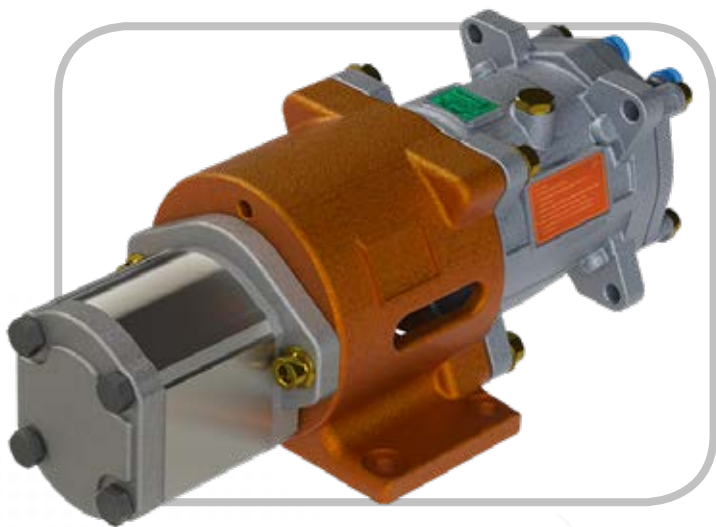
A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.



R134a refrigerant		
Compressor	Oil	Mounting
UX150	PAG56 (160 ml)	Direct mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UXF150	POE32 (160 ml)	Direct mount



# UPH150 | UPHF150



### Features

The Unicla 150 series Hydraulic Drive compressors are universally adaptable and can be driven by any 11-15 cc hydraulic motor with a standard SAE twin-bolt A-type mounting configuration and 5/8" nine-tooth shaft. The unit can be supplied as a complete housing and compressor kit without the hydraulic motor, or the hydraulic drive housing kit on its own without the compressor.

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **4-6 kW**
- Displacement: **145 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UPH and UPHF models are designed to mount to a solid base plate at four points equal to or greater than 180 x 70 mm in diameter.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UPH models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UPHF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

R134a refrigerant		
Compressor	Oil	Mounting
UHP150	PAG56 (160 ml)	Base mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPHF150	POE32 (160 ml)	Base mount

# UP120 | UPF120



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **3-5 kW**
- Displacement: **119 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UP and UPF models are compatible with mounting brackets designed for compressors with 73 mm lug spacings and can be interchanged with many compressors used in various applications.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UP models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UPF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

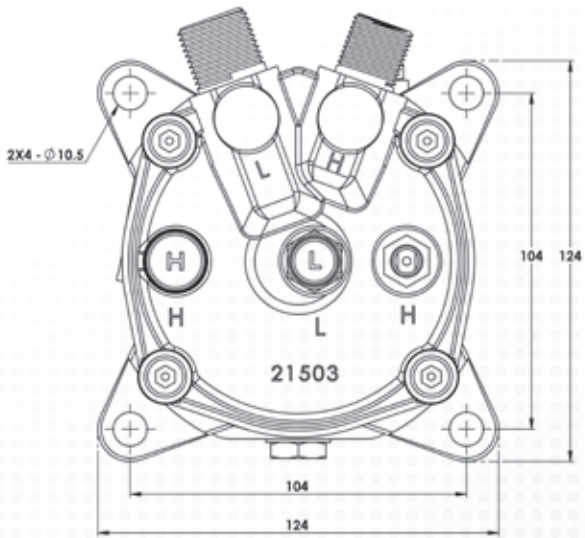
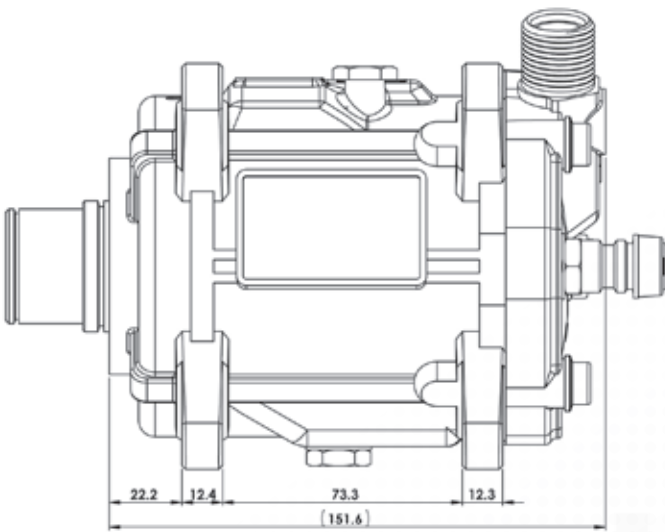
### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

### Clutches

A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.

R134a refrigerant		
Compressor	Oil	Mounting
UP120	PAG56 (150 ml)	TM/QP13 & SD7H13 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPF120	POE32 (150 ml)	TM/QP13 & SD7H13 compatible





# UX120 | UXF120



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **3-5 kW**
- Displacement: **119 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UX and UXF models are direct mount (bolt-through) and have side mounting points 78 mm apart.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UX models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UXF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

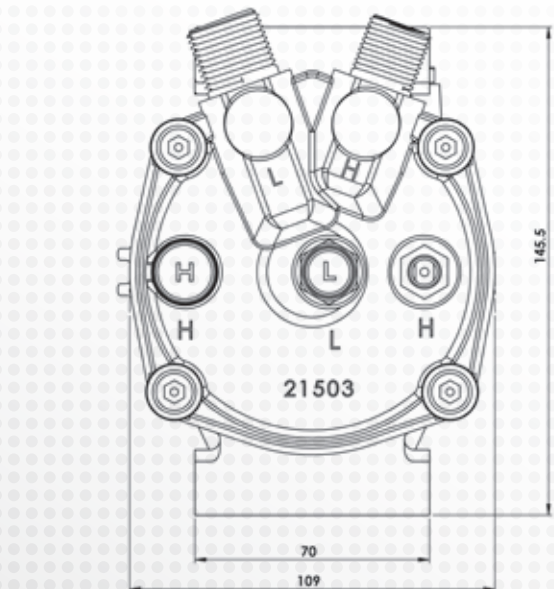
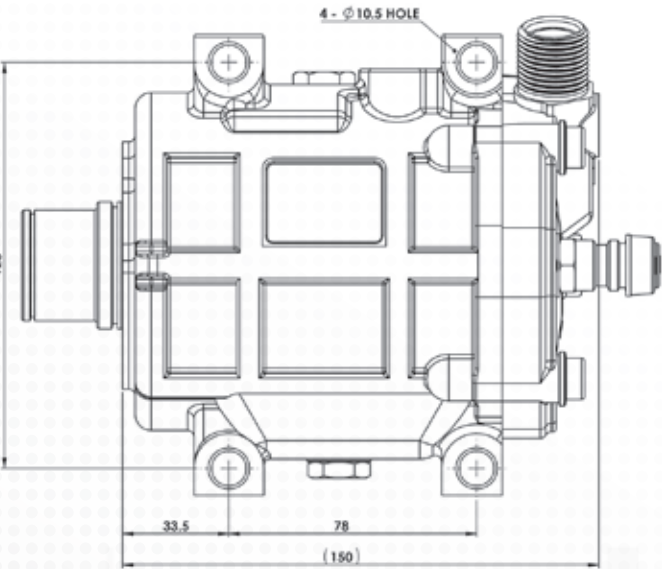
Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

### Clutches

A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.



R134a refrigerant		
Compressor	Oil	Mounting
UX120	PAG56 (150 ml)	Direct mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UXF120	POE32 (150 ml)	Direct mount

# UP90 | UPF90



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **2-3 kW**
- Displacement: **92 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UP and UPF models are compatible with mounting brackets designed for compressors with 67 mm lug spacings and can be interchanged with many compressors used in various applications.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

On UP models an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted on top of the compressor and is supplied as standard on UPF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

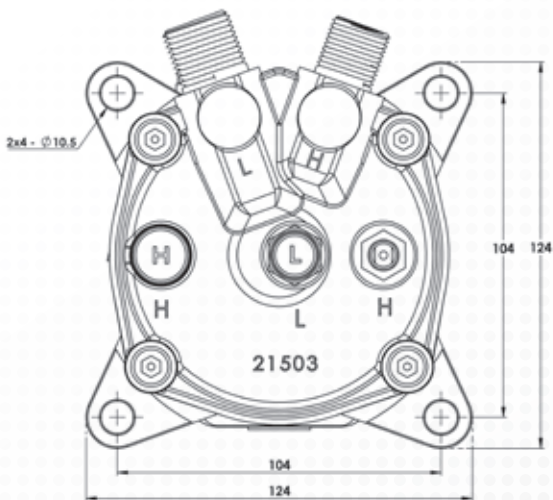
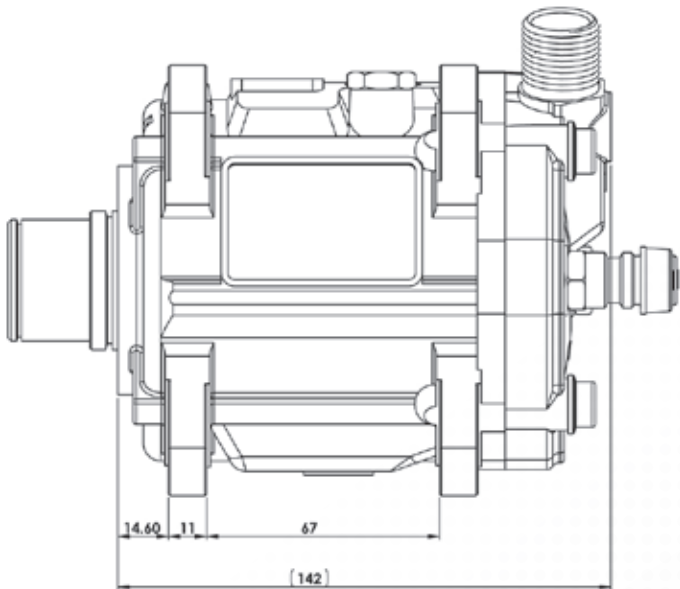
Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 15.

### Clutches

A diverse range of clutches is available for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.



R134a refrigerant		
Compressor	Oil	Mounting
UP90	PAG56 (150 ml)	TM/QP8 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPF90	POE32 (150 ml)	TM/QP8 compatible



# UC90



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **2-3 kW**
- Displacement: **92 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UC90 is a single lug mount (swing or alternator type) design with two single bottom lugs 60 mm apart.

### Service valves

A low-side service valve is fitted to the rear cap, including a high-pressure relief valve.

### Oil return port

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

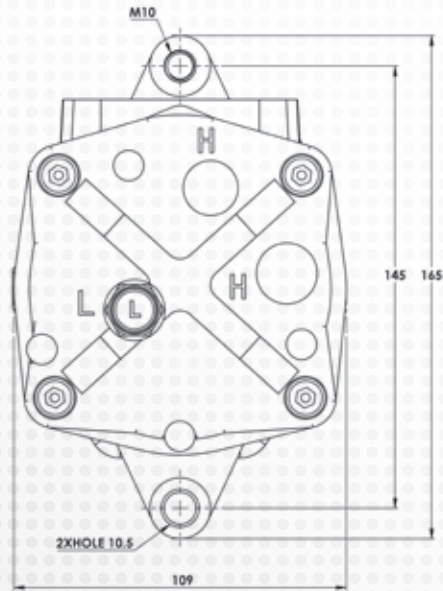
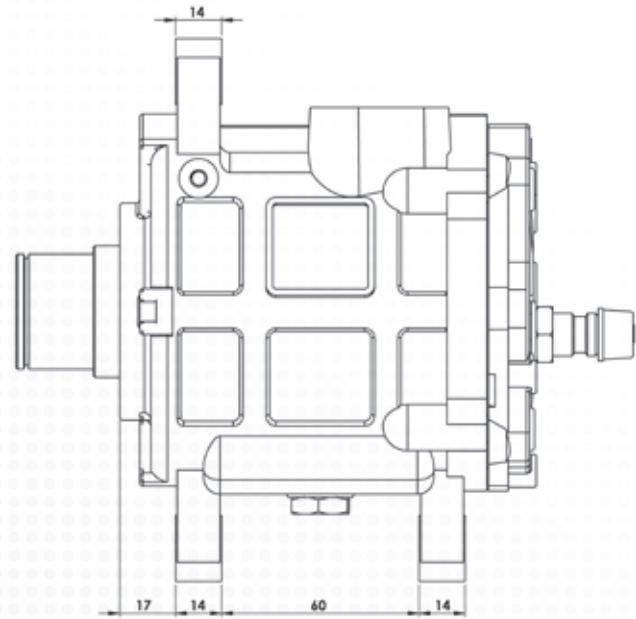
### Hose ports

Hose ports are located on top of the compressor body and are made to suit Unicla pad type fittings. Vertical #8 O-ring hose fittings are included as standard. Alternative fittings can be designed according to customer requirements.

### Clutches

A diverse range of clutches is available with 4-polygroove and M-section pulleys for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.

R134a refrigerant		
Compressor	Oil	Mounting
UC90	PAG56 (150 ml)	Single lug swing type



# UC45



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **1-2 kW**
- Displacement: **46 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UC45 is a single lug mount (swing or alternator type) design with two single bottom lugs 60 mm apart.

### Service valves

A low-side service valve is fitted to the rear cap.

### Oil return port

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – can be optionally fitted. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

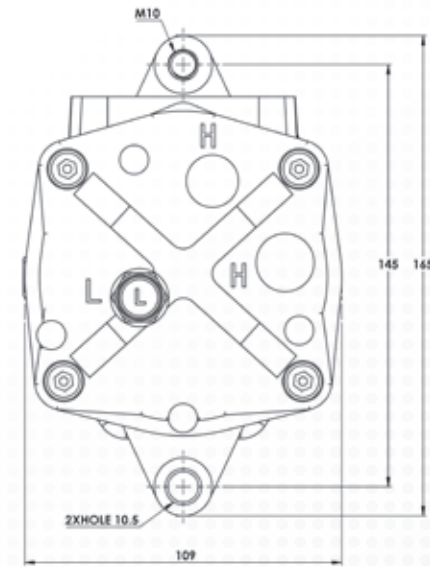
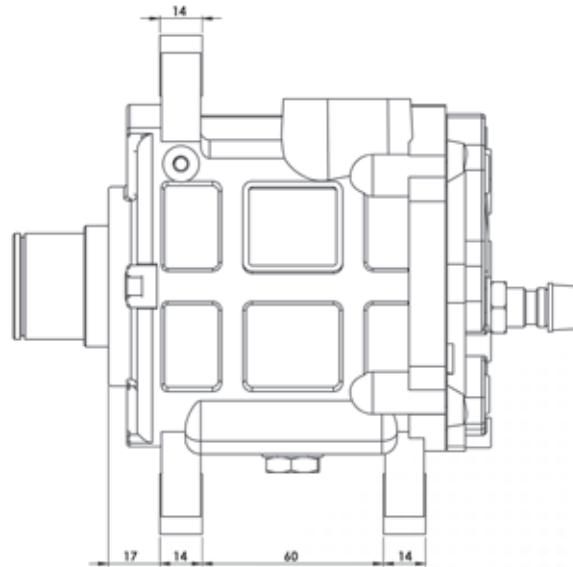
### Hose ports

Hose ports are located on top of the compressor body and are made to suit Unicla pad type fittings. Vertical #8 O-ring hose fittings are included as standard. Alternative fittings can be designed according to customer requirements.

### Clutches

A diverse range of clutches is available with 4-polygroove and M-section pulleys for 12V and 24V applications, with or without metal dust covers. Please see *Clutch, rear cap and hose port options* on page 15.

R134a refrigerant		
Compressor	Oil	Mounting
UC45	PAG56 (150 ml)	Single lug swing type



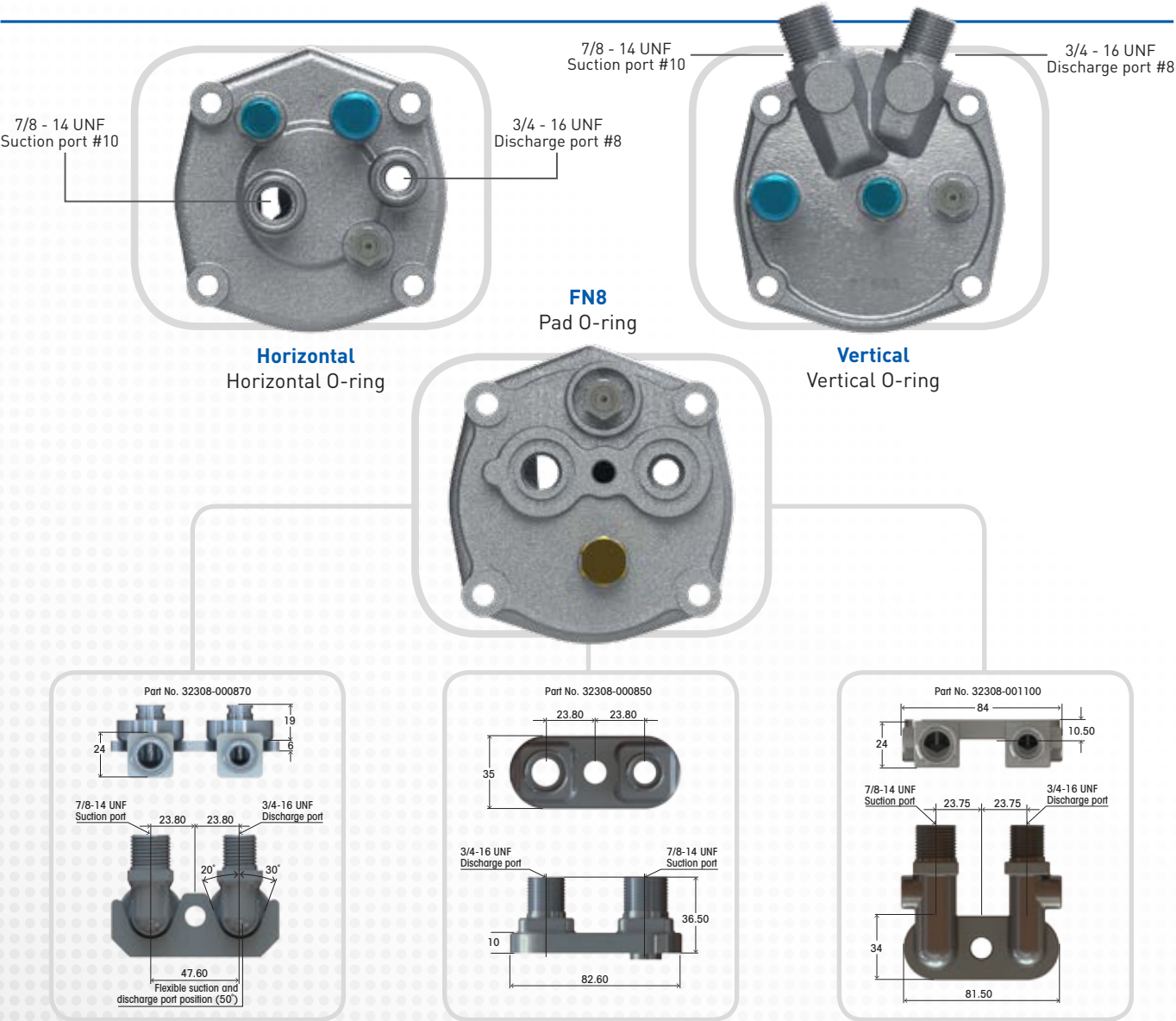


Clutch, rear cap and hose port options

Clutches available for 45-170 Series Compressors

	115 mm	119 mm	120 mm	125 mm	132 mm	135 mm	145 mm	12V	24V
A-Groove				✓				✓	✓
AA-Groove				✓	✓		✓	✓	✓
M-Groove*	✓							✓	✓
B-Groove					✓	✓		✓	✓
BB-Groove						✓		✓	✓
4-Groove*			✓					✓	✓
5- Groove		✓						✓	✓
6- Groove		✓		✓				✓	✓
8-Groove		✓		✓		✓		✓	✓
10-Groove		✓		✓				✓	✓

\*M- and 4-Groove only fit on UC45 and UC90 compressor.



Notes

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# B Group

## 200 Series Compressors



## B Group 200 Series Compressors

### Features

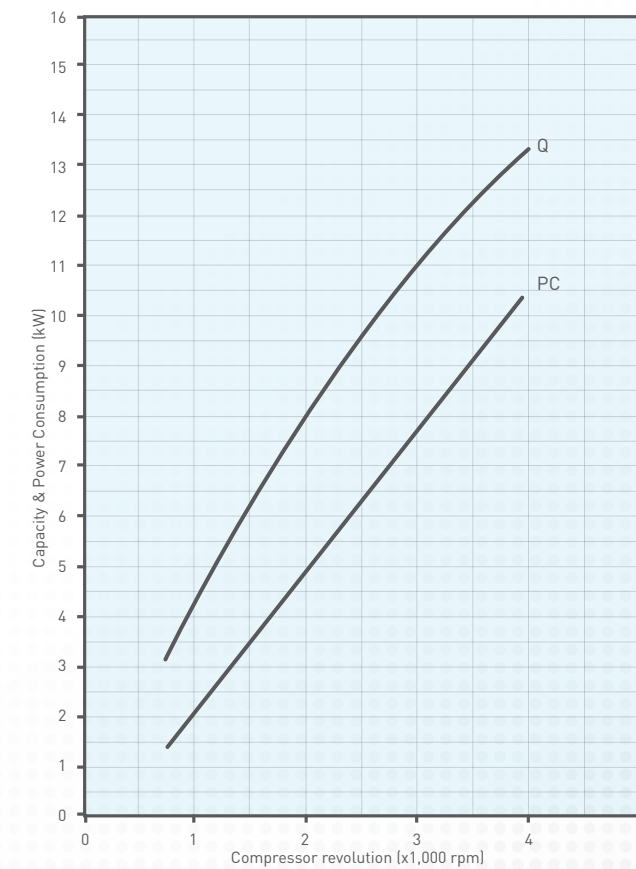
The Unicla 200 series compressors are designed to meet the demands of larger mid-range single and twin air-conditioning systems, and refrigeration applications where the system capacity requirement is **6-11 kW**.

Many transport refrigeration and air-conditioning systems in service today have compressors that are either too small or too large. The Unicla 200 series has always solved this 'gap' in compressor sizing and has continued to be known as the most reliable, highest capacity 200 cc compressor suitable for heavy duty transport refrigeration, military, marine, minibus, mining and agricultural applications.

Refrigerant leakage from compressor body O-rings is eliminated by separately enclosing the entire compressor working assembly in a one-piece crankcase, which also reduces the chance of heat distortion to the outer housing. This results in the compressor maintaining piston alignment and high compression for the duration of its service life, a feature Unicla is well known for.

The UPF, UMF and UXF model 200 series compressors have been upgraded internally to suit R404a and R452a low-temperature refrigerants. Features include higher-gauge reed valves, a further refined and polished swashplate and RL32 polyol ester (POE) oil.

### 200 Series Performance - R134a refrigerant



\*Based on 9°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

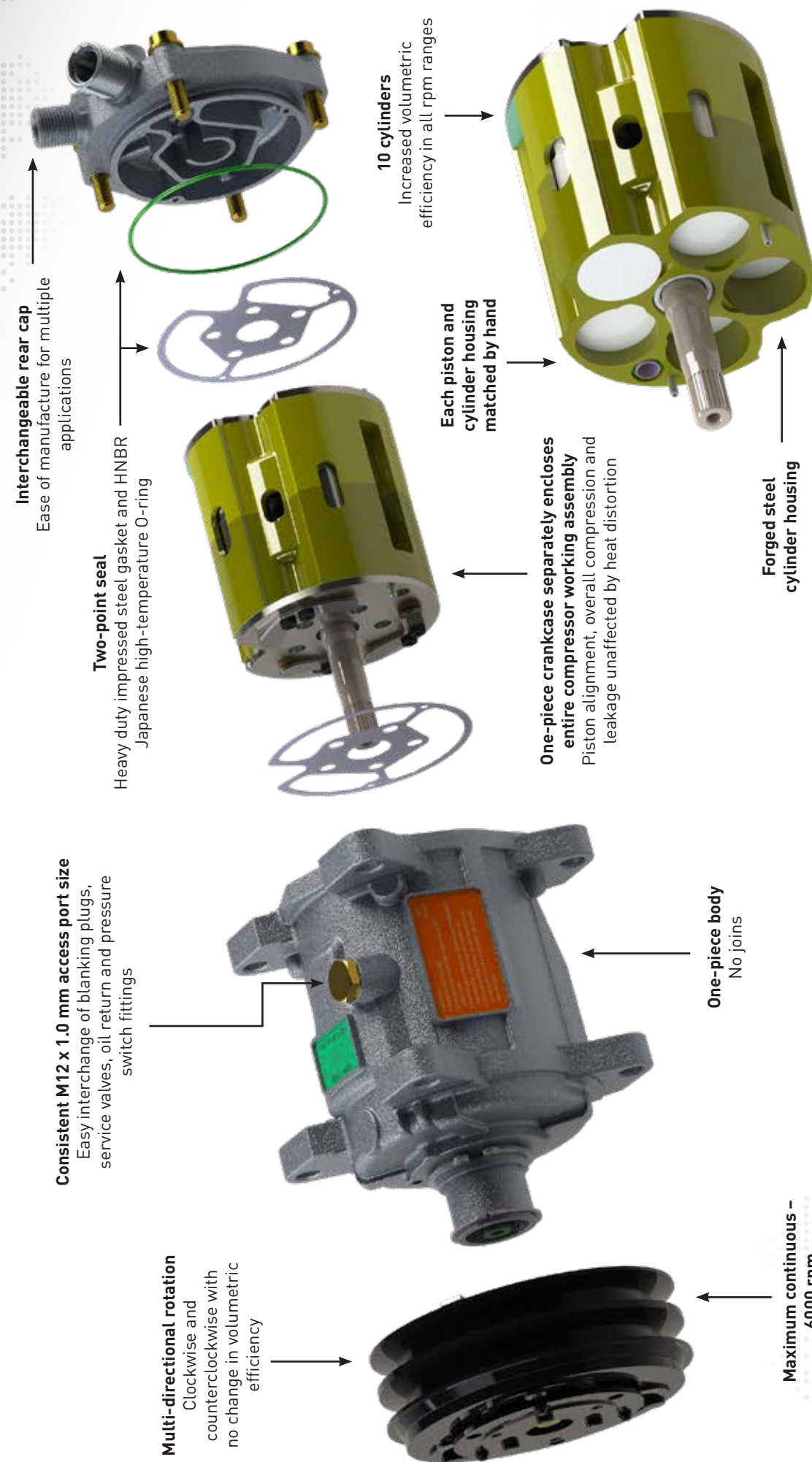
Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	1.82 bar
Evaporating temperature	-1°C



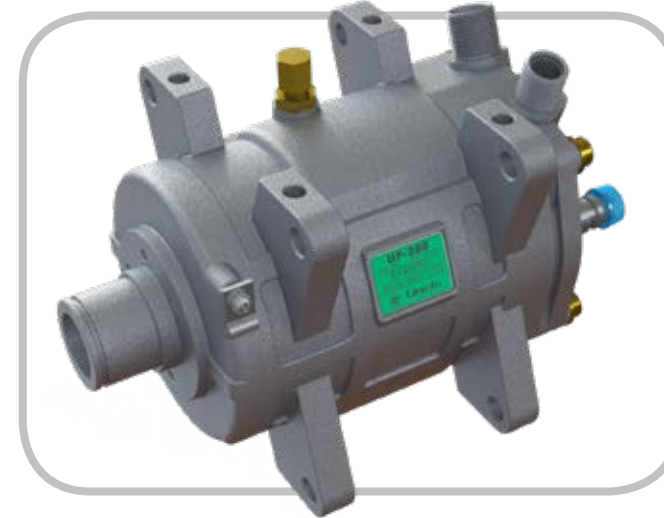


# Unicla

## Advantages 200 Series Compressors



## UP200 | UPF200



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **6-11 kW**
- Displacement: **200 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UP and UPF models are compatible with mounting brackets designed for compressors with 80 mm lug spacings and can be interchanged with many compressors used in various applications.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return

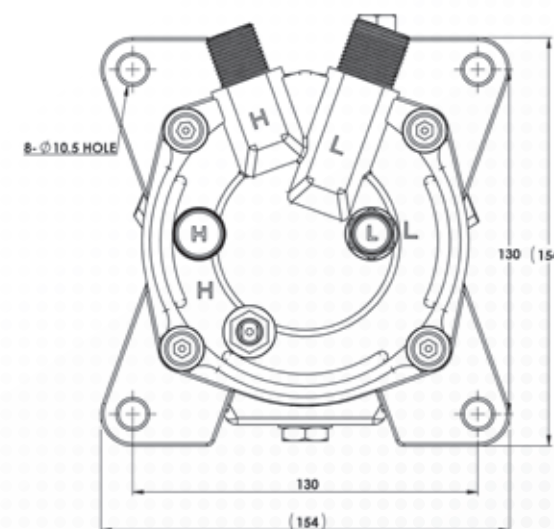
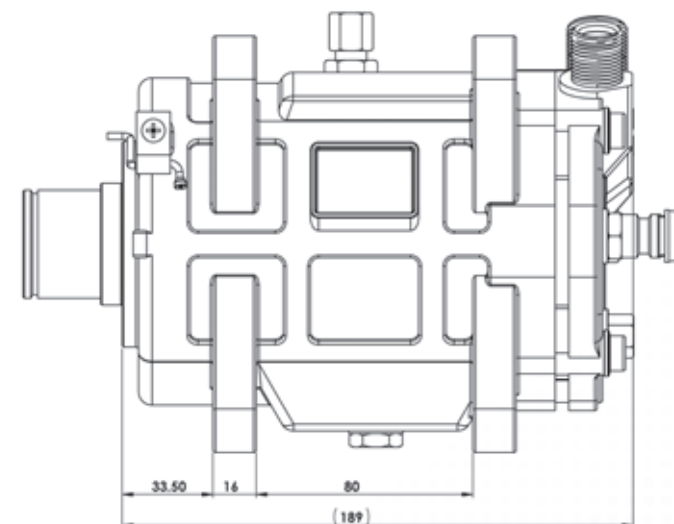
An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 8.



R134a refrigerant		
Compressor	Oil	Mounting
UP200	PAG56 (180 ml)	Ear mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPF200	POE32 (180 ml)	Ear mount



# UM200 | UMF200



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **6-11 kW**
- Displacement: **200 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UM and UMF model compressors feature a new mounting configuration of four conventional bolt-through mounting points that have been narrowed to 92 mm at the top and 87 mm at the bottom. They are directly compatible with TM21 and QP21 compressors.

### Service valves

High-pressure relief valve fitted, service valves not fitted.

### Oil return

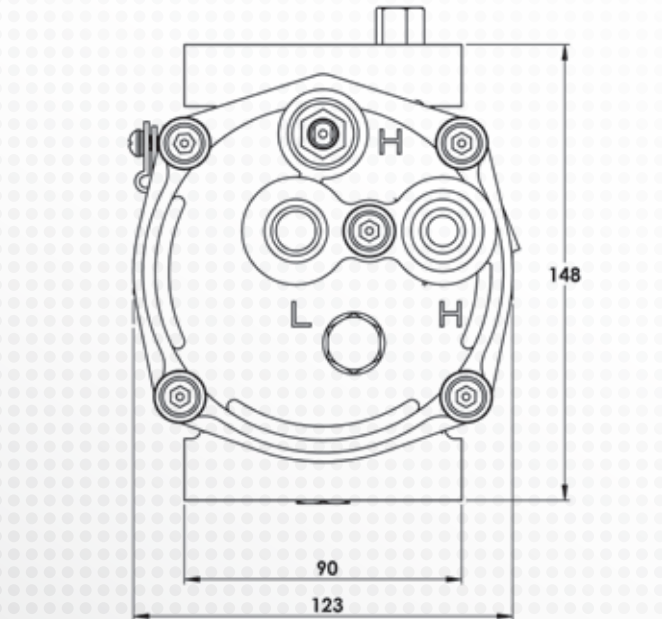
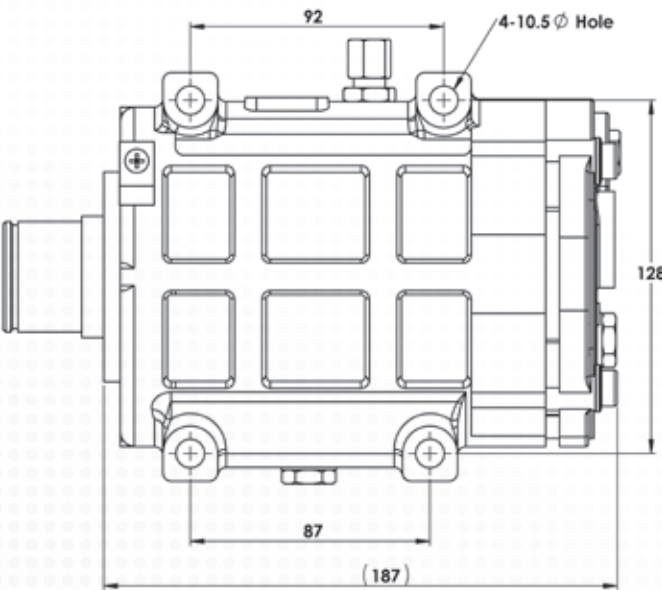
An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

### Hose ports

Please see *Clutch, rear cap and hose port options* on page 8.



R134a refrigerant		
Compressor	Oil	Mounting
UM200	PAG56 (180 ml)	TM/QP21 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UMF200	POE32 (180 ml)	TM/QP21 compatible

# UX200 | UXF200



### Features

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **6-11 kW**
- Displacement: **200 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The UX and UXF models are direct mount (bolt-through) and have side mounting points 94 mm apart.

### Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

### Oil return

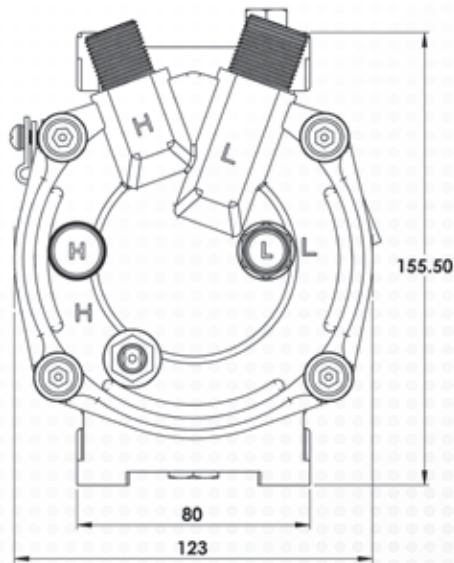
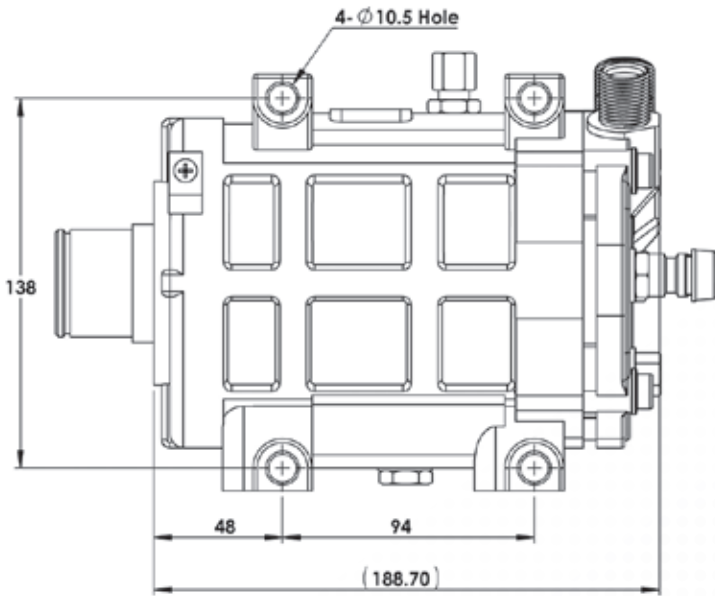
An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

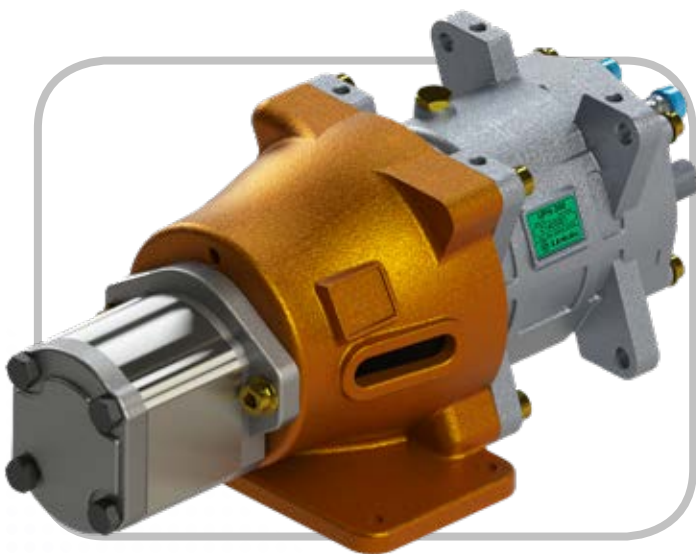
### Hose ports

Please see *Clutch, rear cap and hose port options* on page 8.



R134a refrigerant		
Compressor	Oil	Mounting
UX200	PAG56 (180 ml)	Direct mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UXF200	POE32 (180 ml)	Direct mount

UPH200 | UPHF200



Features

The Unicla 200 series Hydraulic Drive compressors are universally adaptable and can be driven by any 11-15 cc hydraulic motor with a standard SAE twin-bolt A-type mounting configuration and 5/8" nine-tooth shaft. The unit can be supplied as a complete housing and compressor kit without the hydraulic motor, or the hydraulic drive housing kit on its own without the compressor.

- Unicla 10-cylinder swashplate
- Suitable for applications with a system capacity requirement of **6-11 kW**
- Displacement: **200 cc/rev**
- Maximum continuous: **6000 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

Mounting

The UPH and UPHF models are designed to mount to a solid base plate at four points equal to or greater than 185 x 80 mm in diameter.

Service valves

Low- and high-side service valves are fitted to the rear cap, including a high-pressure relief valve.

Oil return port

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is supplied as standard on both UPH and UPHF models. It has a unique flow design suited to the Unicla oil separator (Part No. OS000010) and is interchangeable with the low-side service valve.

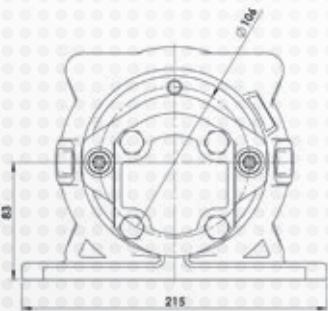
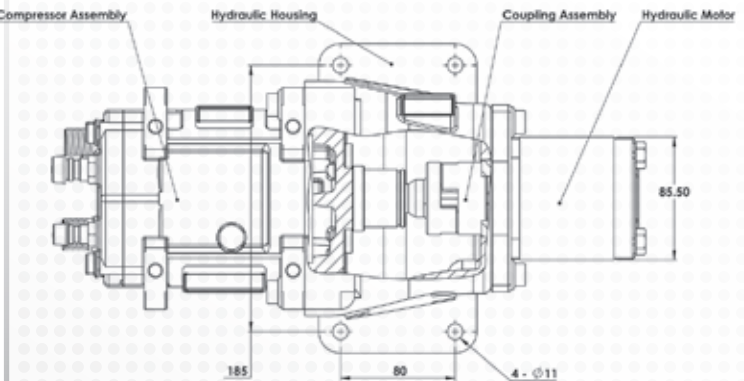
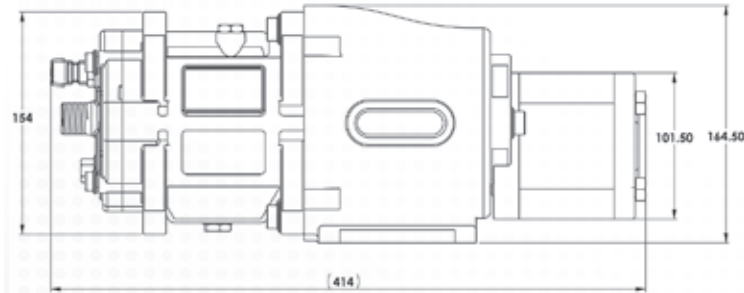
Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

Hose ports

Please see *Clutch, rear cap and hose port options* on page 8.

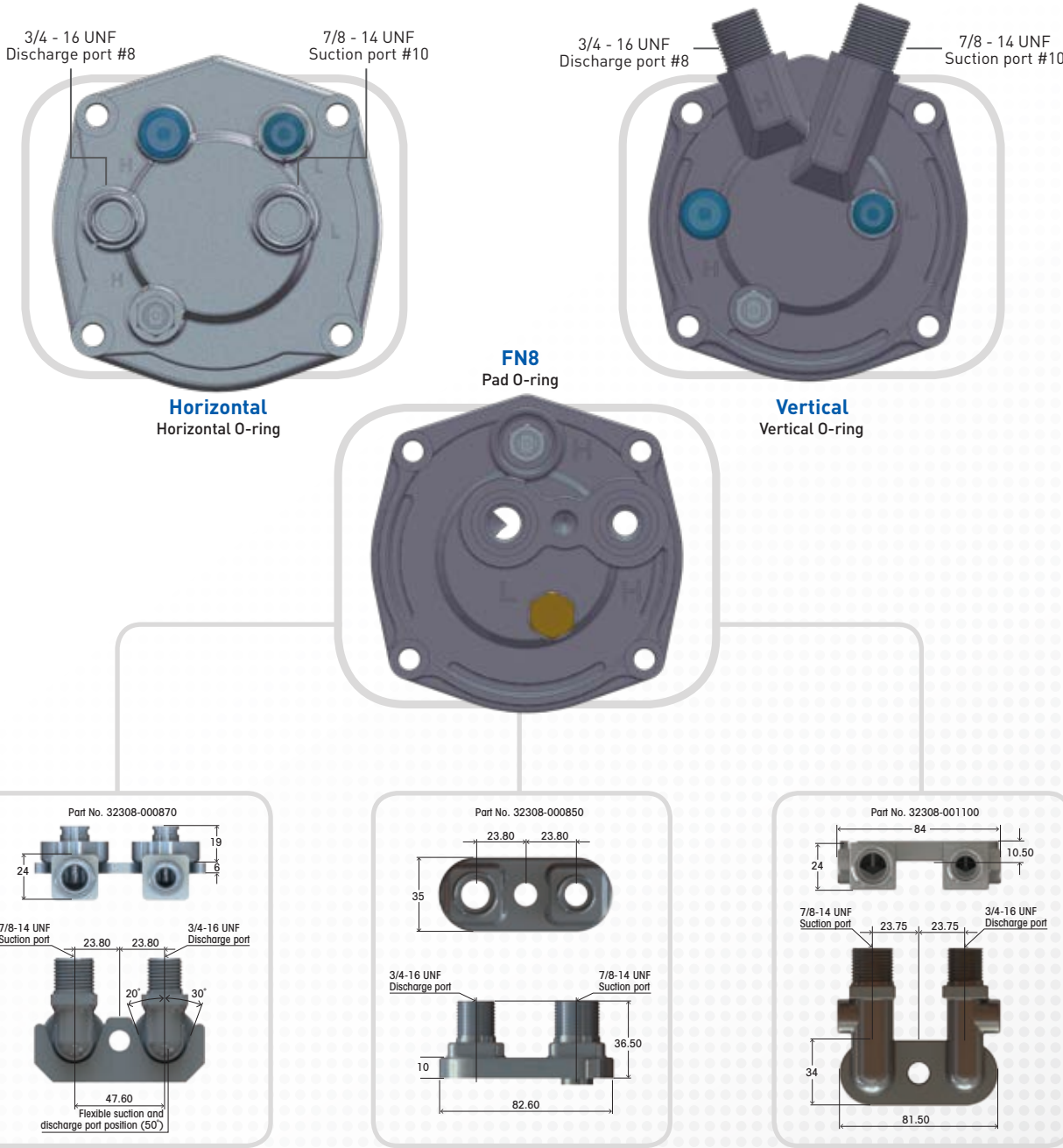
R134a refrigerant		
Compressor	Oil	Mounting
UPH200	PAG56 (180 ml)	Base mount
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UPHF200	POE32 (180 ml)	Base mount



Clutch, rear cap and hose port options

Clutches available for 200 Series Compressors

Type	125	135	145	152	12V	24V
AA-Groove			✓		✓	✓
B-Groove			✓		✓	✓
BB-Groove			✓		✓	✓
6-Groove	✓				✓	✓
8-Groove		✓			✓	✓
10-Groove		✓			✓	✓





# B Group

## 300 Series Compressors



## B Group 300 Series Compressors

### Features

The Unicla 300 series compressors are the ideal choice for designers of air-conditioning and refrigeration systems in larger commercial applications where the system capacity requirement is **10-16 kW**. For systems with two or even three evaporators, Unicla 300 series compressors can be used as a single unit or mounted in twin or triple configurations.

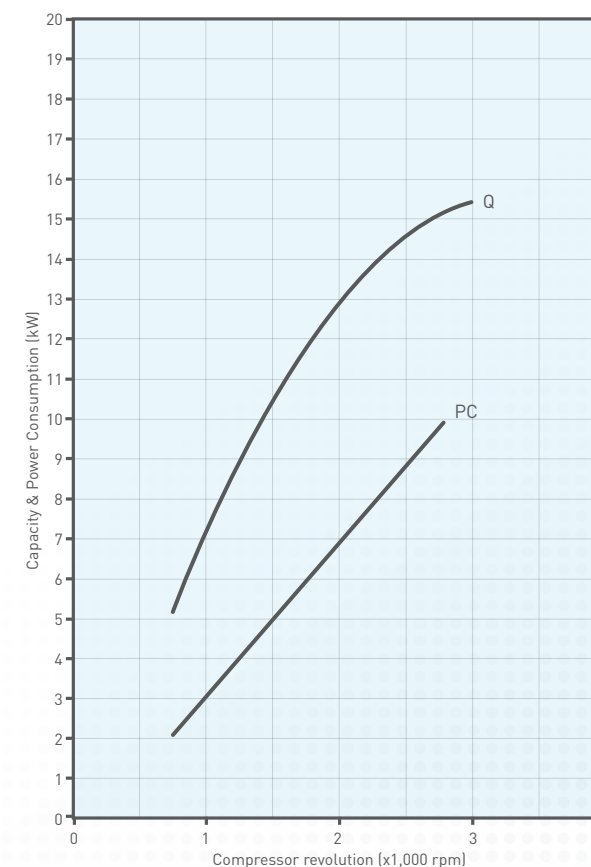
The 300 series has porting for horizontal or vertical hose connections as standard, and heavy duty blanking plates installed on outlets that are not in use.

These compressors feature the world-renowned Unicla 10-cylinder swashplate design that delivers extremely quiet and smooth operation with unbeatable volumetric efficiency through all revolution ranges – especially at low rpm – in either clockwise or counterclockwise direction.

Refrigerant leakage from compressor body O-rings is eliminated by separately enclosing the entire compressor working assembly in a one-piece crankcase, which also reduces the chance of heat distortion to the outer housing. This results in the compressor maintaining piston alignment and high compression for the duration of its service life, a feature Unicla is well known for.

The UXF and UMF model 300 series compressors have been upgraded internally to suit R404a and R452a low-temperature refrigerants. Features include higher-gauge reed valves, a further refined and polished swashplate and RL32 polyol ester (POE) oil.

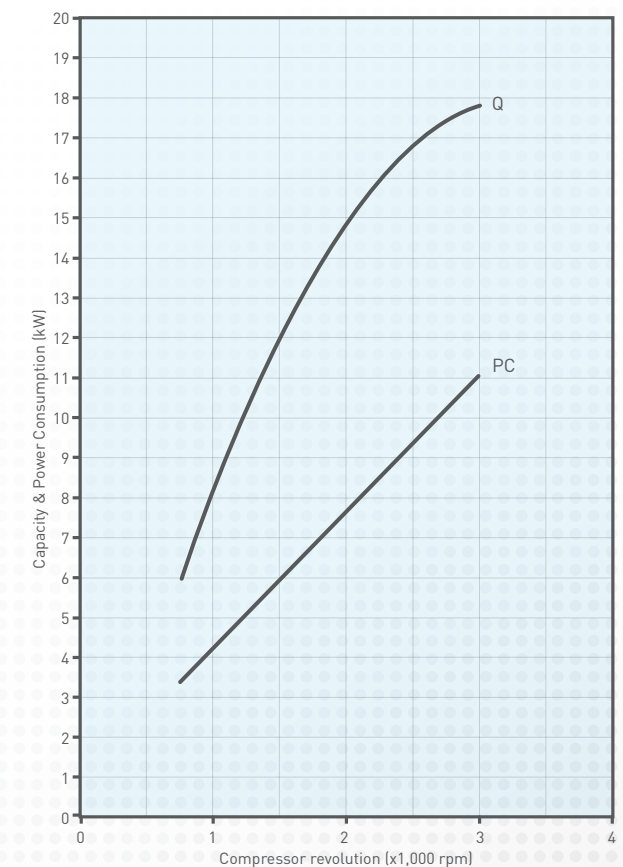
**330 Series Performance  
- R134a refrigerant**



\*Based on 9°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	1.82 bar
Evaporating temperature	-1°C

**380 Series Performance  
- R134a refrigerant**



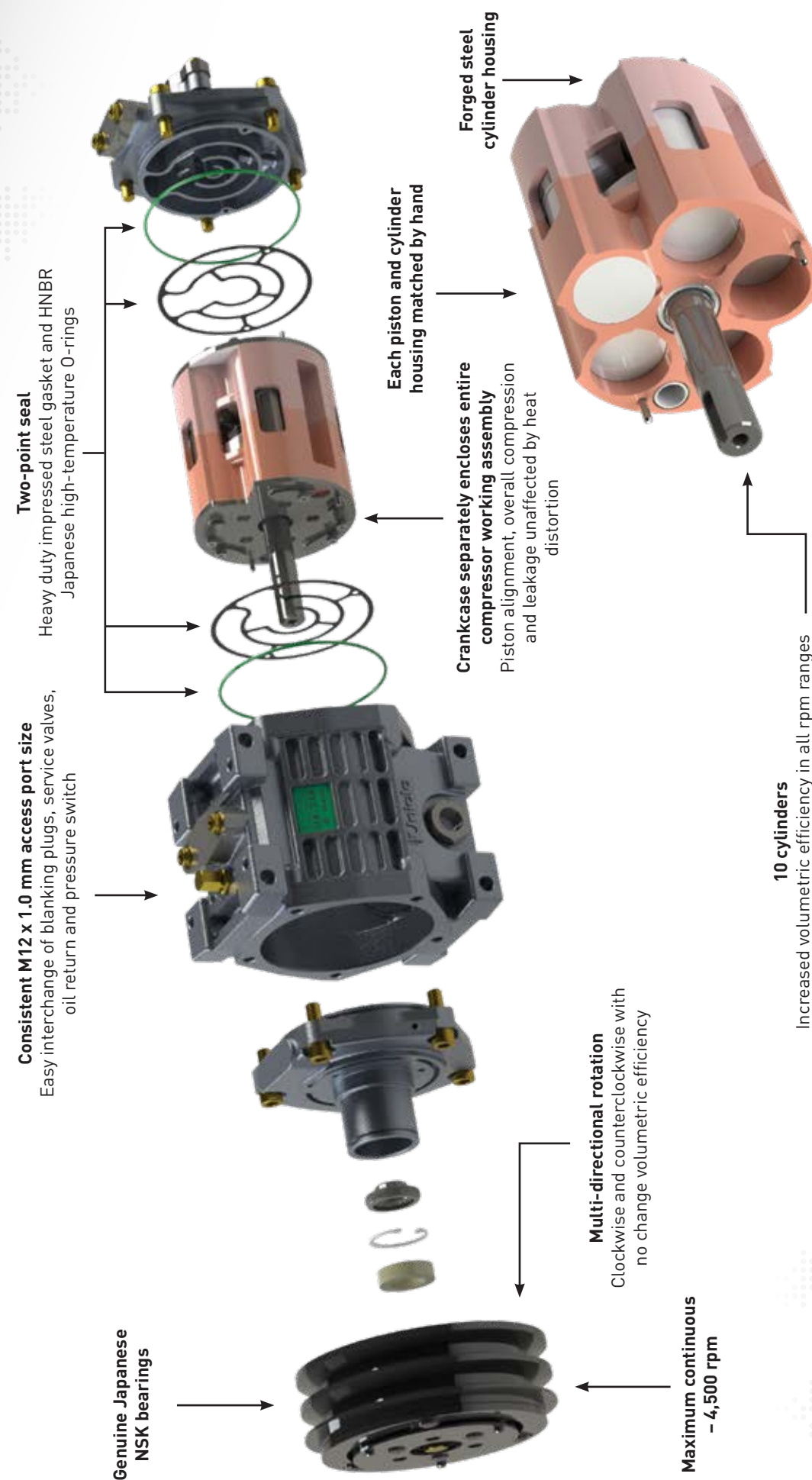
\*Based on 9°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	1.82 bar
Evaporating temperature	-1°C



# Unicla

## Advantages 300 Series Compressors



## UX330 | UXF330



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial applications with a system capacity requirement of **10-14 kW**
- Displacement: **330 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

Suited to all mounting brackets made for direct mount (bolt-through) compressors with bolt holes 104 mm apart, including four M10 x 1.5 mm threaded holes top and bottom 75 mm apart.

### Hose ports

Porting for horizontal or vertical hose connections are standard, achieved by heavy duty blanking plates installed on outlets that are not in use. A range of standard hose port manifolds is available. Please see *Clutch and hose port options* on page 12.

### Service valves

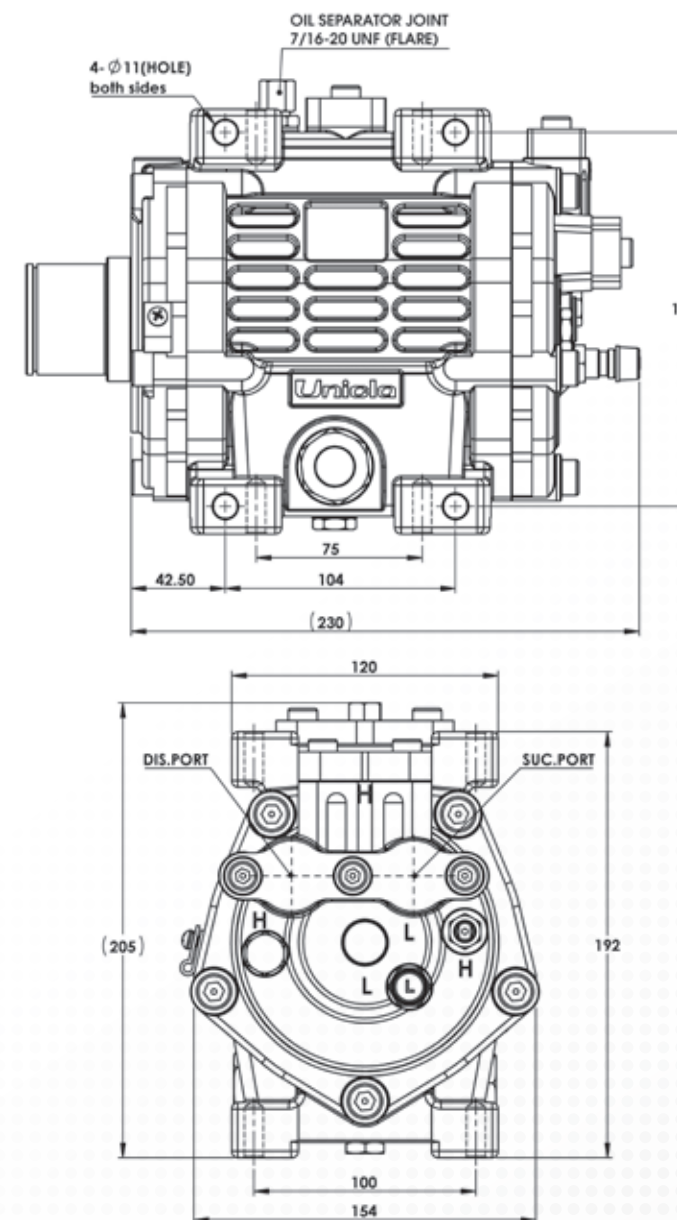
A low-side service valve is fitted to the rear cap, including a high-pressure relief valve.

### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000030) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.



R134a refrigerant		
Compressor	Oil	Mounting
UX330	PAG56 or POE68 (600 ml)	Direct (all sides)
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UXF330	POE32 (600 ml)	Direct (all sides)



# UM330 | UMF330



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial applications with a system capacity requirement of **10-14 kW**
- Displacement: **330 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system on UM models provides a total of 12 mounting points (four on the left, right and bottom sides) enabling direct compatibility with TM31 and QP31 compressors. Each mounting point has an M10 x 1.5 mm threaded hole, providing excellent flexibility in engine mounting and bracket design.

### Hose ports

Porting for horizontal or vertical hose connections are standard, achieved by heavy duty blanking plates installed on outlets that are not in use. A range of standard hose port manifolds is available. Please see *Clutch and hose port options* on page 12.

### Service valves

A low-side service valve is fitted to the rear cap, including a high-pressure relief valve.

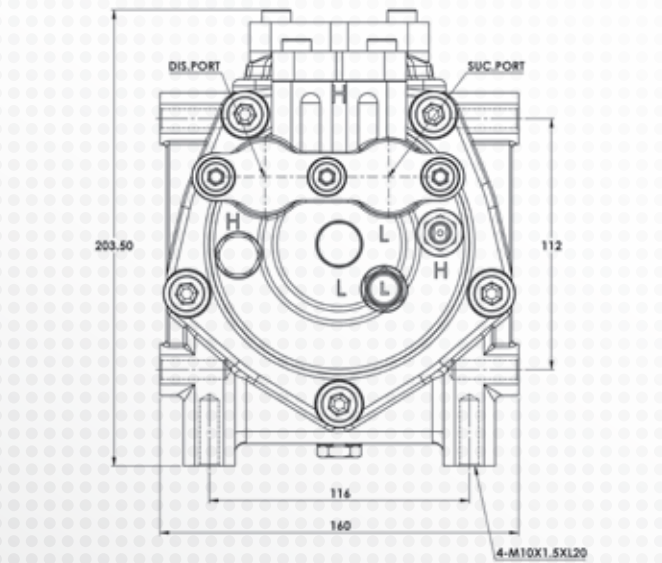
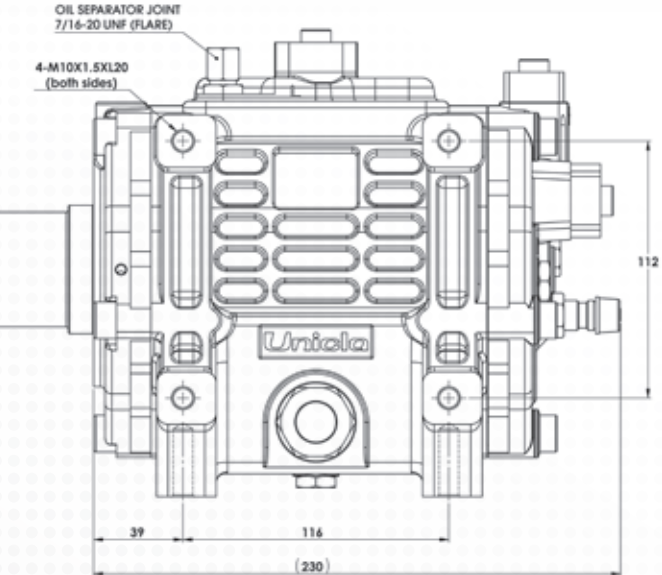
### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000030) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

R134a refrigerant		
Compressor	Oil	Mounting
UM330	PAG56 or POE68 (600 ml)	TM/QP31 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UMF330	POE32 (600 ml)	TM/QP31 compatible



# UN330



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial applications with a system capacity requirement of **10-14 kW**
- Displacement: **330 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system on UN models provides a total of eight mounting points (four on both the left and right sides), enabling direct compatibility with Denso 10P30B compressors. Mounting points on each side of the compressor are 94 mm and 81 mm apart.

### Hose ports

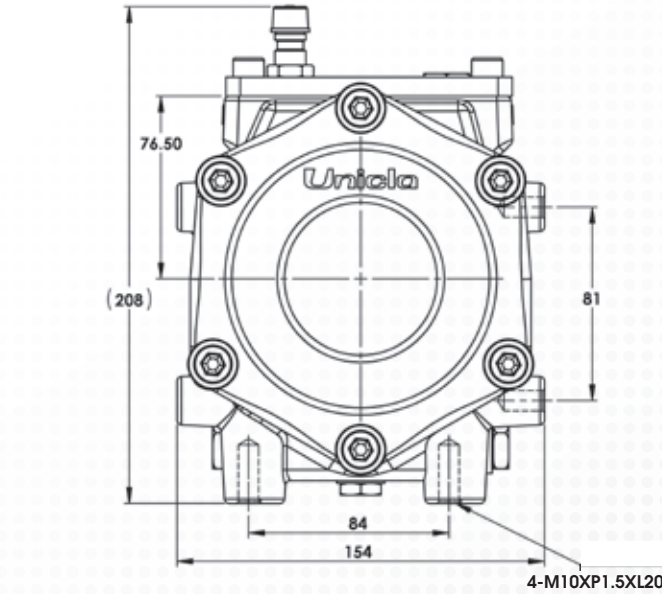
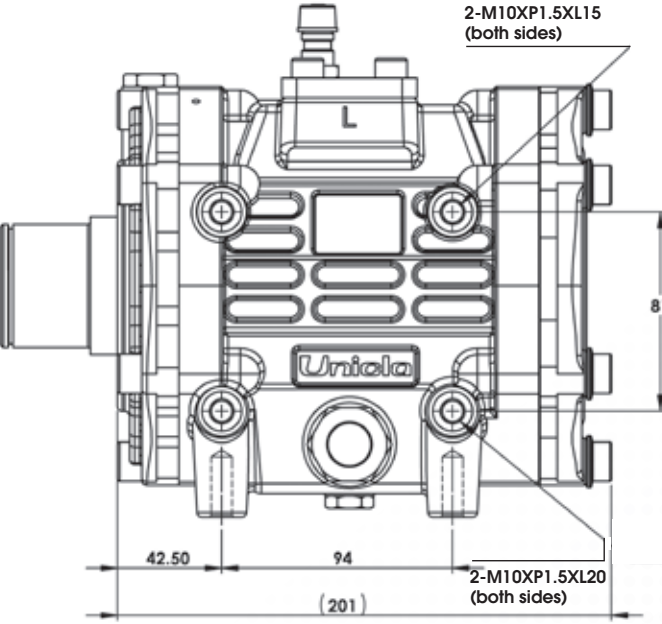
A single piece manifold is available. Please see *Clutch and hose port options* on page 12.

### Service valves

A low-side service valve is fitted to the top.

### Oil return and other ports

An oil return port is not fitted.



R134a refrigerant		
Compressor	Oil	Mounting
UN330	PAG56 or POE68 (600 ml)	Denso 10P30B compatible



# UNX330



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial applications with a system capacity requirement of **10-14 kW**
- Displacement: **330 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The direct mounting system (bolt-through) on the UNX provides a total of eight mounting points (four on both the left and right sides), enabling direct compatibility with Denso 10P30C compressors. Mounting points on each side of the compressor are 104 mm and 169 mm apart.

### Hose ports

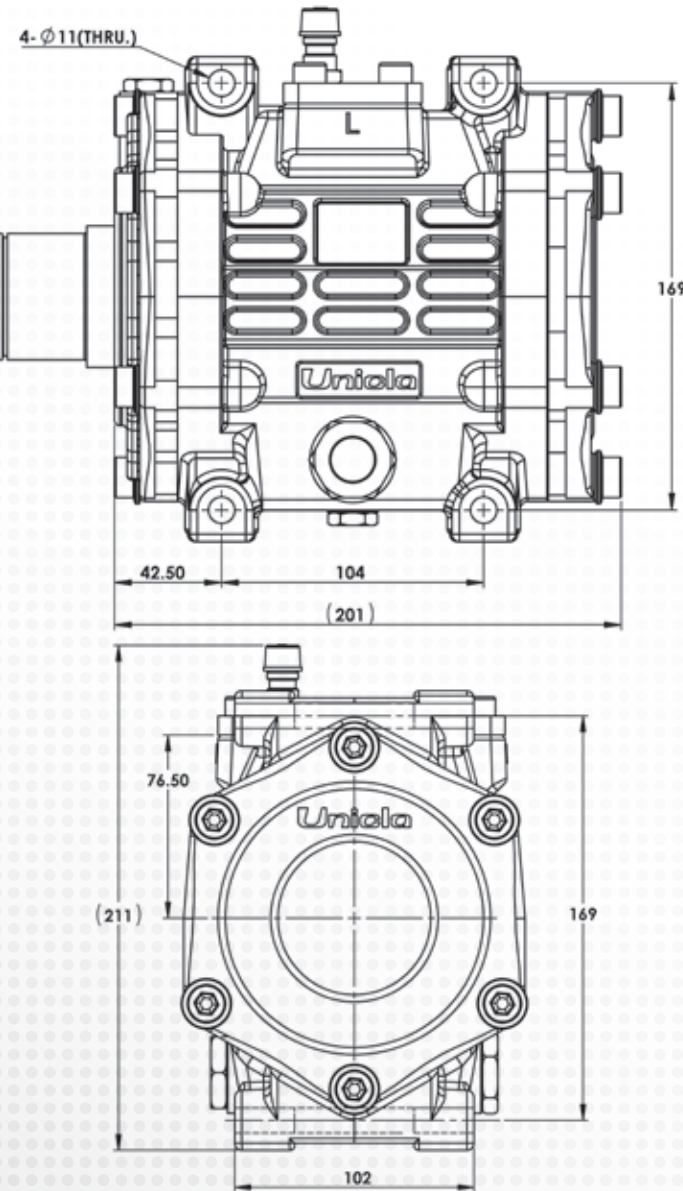
A single-piece manifold is available. Please see *Clutch and hose port options* on page 12.

### Service valves

A low-side service valve is fitted to the top.

### Oil return and other ports

An oil return port is not fitted.



R134a refrigerant		
Compressor	Oil	Mounting
UNX330	PAG56 or POE68 (600 ml)	Denso 10P30C compatible

# UX380 | UXF380



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial applications with a system capacity requirement of **12-16 kW** and can be fitted into the same position as a Unicla UX330 or UXF330
- Displacement: **380 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

Suited to all mounting brackets made for direct mount (bolt-through) compressors with bolt holes 104 mm apart, including four M10 x 1.5 mm threaded holes top and bottom 75 mm apart.

### Hose ports

Porting for horizontal or vertical hose connections are standard, achieved by heavy duty blanking plates installed on outlets that are not in use. A range of standard hose port manifolds is available. Please see *Clutch and hose port options* on page 12.

### Service valves

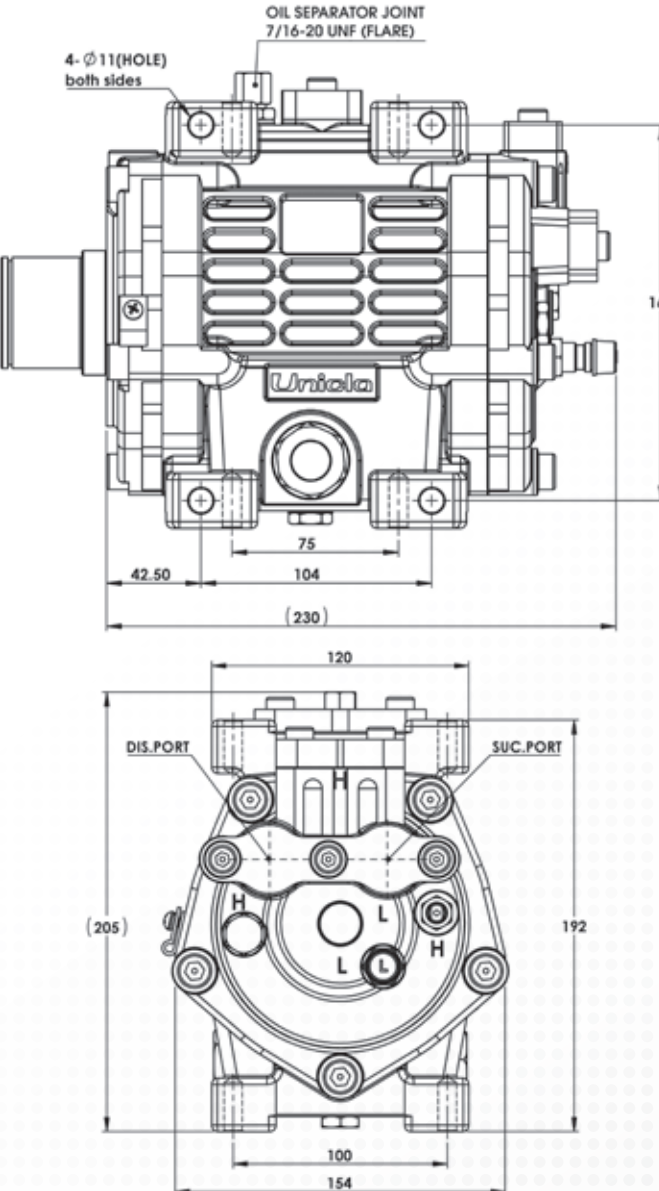
A low-side service valve is fitted to the rear cap, including a high-pressure relief valve.

### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000030) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.



R134a refrigerant		
Compressor	Oil	Mounting
UX380	PAG56 or POE68 (600 ml)	Direct (all sides)
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UXF380	POE32 (600 ml)	Direct (all sides)



# UM380 |UMF380



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial applications with a system capacity requirement of **12-16 kW** and can be fitted into the same position as a Unicla UM330 or UMF330
- Displacement: **380 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system on UM models provides a total of 12 mounting points (four on the left, right and bottom sides) enabling direct compatibility with TM31 and QP31 compressors. Each mounting point has an M10 x 1.5 mm threaded hole, providing excellent flexibility in engine mounting and bracket design.

### Hose ports

Porting for horizontal or vertical hose connections are standard, achieved by heavy duty blanking plates installed on outlets that are not in use. A range of standard hose port manifolds is available. Please see *Clutch and hose port options* on page 12.

### Service valves

A low-side service valve is fitted to the rear cap, including a high-pressure relief valve.

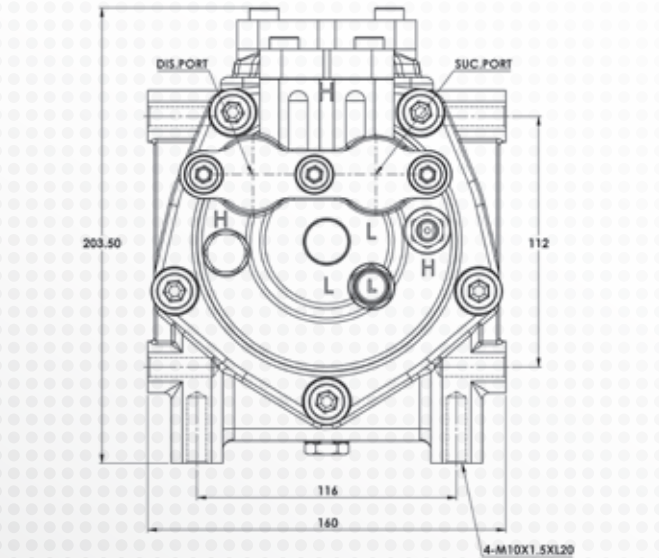
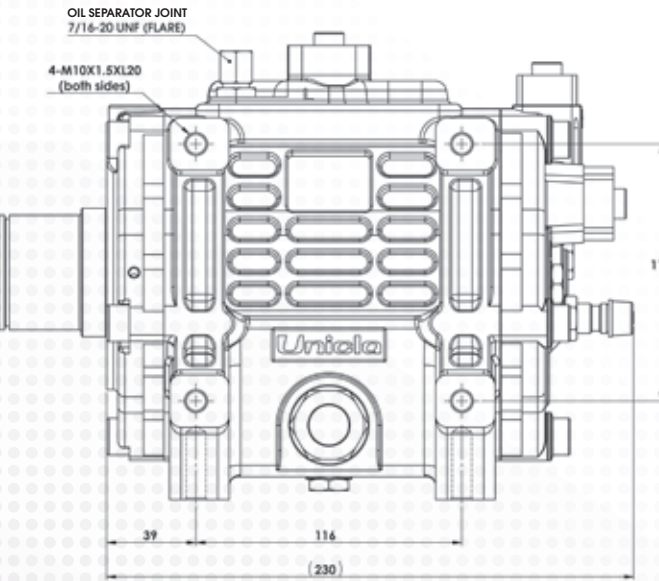
### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000030) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

R134a refrigerant		
Compressor	Oil	Mounting
UM380	PAG56 or POE68 (600 ml)	TM/QP31 compatible
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UMF380	POE32 (600 ml)	TM/QP31 compatible



# UN380



### Features

- Unicla 10-cylinder swashplate
- Suitable for larger commercial and bus applications with a system capacity requirement of **12-16 kW**
- Displacement: **380 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation with excellent performance through all rev ranges
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Lip seal with high tolerance to heat and operational fatigue
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system on UN models provides a total of eight mounting points (four on both the left and right sides), enabling direct compatibility with Denso 10P30B compressors. Mounting points on each side of the compressor are 94 mm and 81 mm apart.

### Hose ports

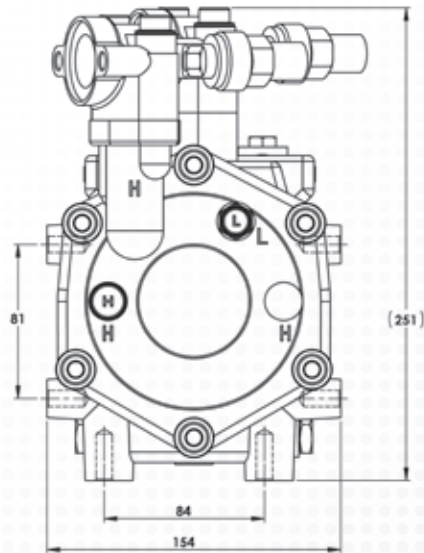
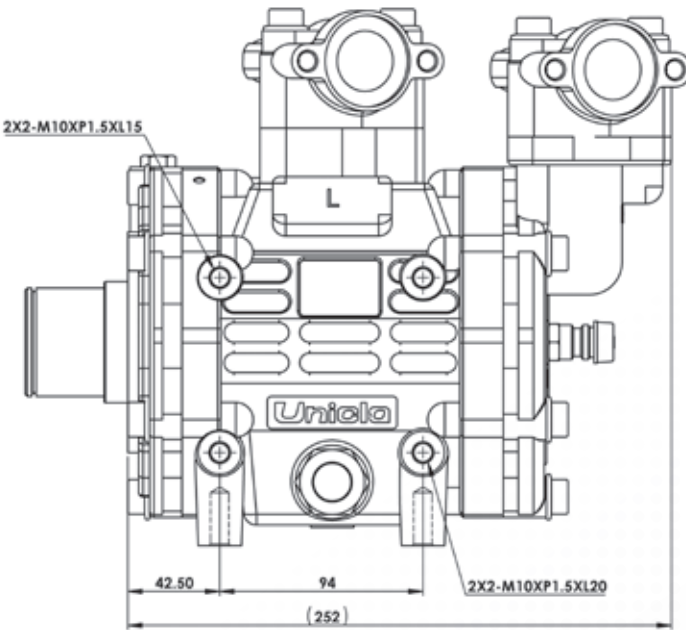
Both ports are fitted with a shut-off manifold assembly with back seating capability via stem valves.

### Service valves

Low- and high-side service valves are fitted to the rear cap.

### Oil return and other ports

An oil return port is not fitted.



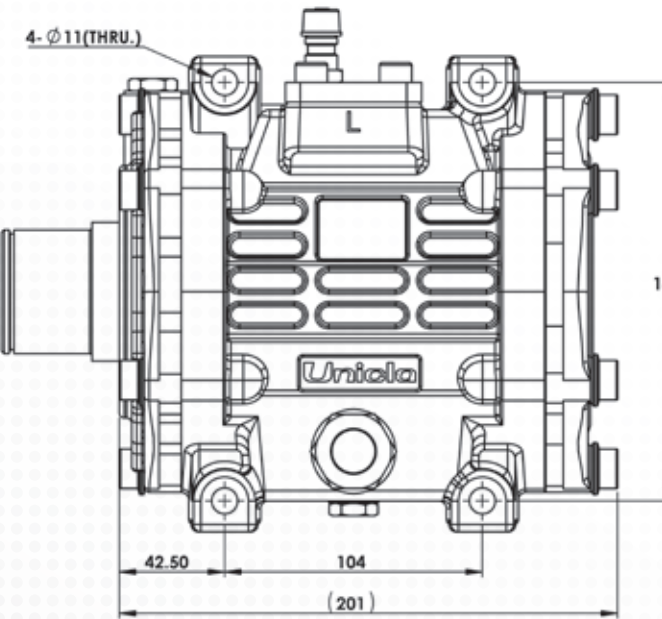
R134a refrigerant		
Compressor	Oil	Mounting
UN380	PAG56 or POE68 (600 ml)	Denso 10P30B compatible



UNX380



- Features**
- Unicla 10-cylinder swashplate
  - Suitable for larger commercial applications with a system capacity requirement of **12-16 kW**
  - Displacement: **380 cc/rev**
  - Maximum continuous: **4500 rpm**
  - Smooth and quiet operation with excellent performance through all rev ranges
  - Clockwise and counterclockwise rotation with no change in volumetric efficiency
  - Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
  - Forged steel cylinder housing
  - Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
  - Lip seal with high tolerance to heat and operational fatigue
  - Genuine NSK bearings throughout



**Mounting**

The direct mounting system (bolt-through) on the UNX provides a total of eight mounting points (four on both the left and right sides), enabling direct compatibility with Denso 10P30C compressors. Mounting points on each side of the compressor are 104 mm and 169 mm apart.

**Hose ports**

A single-piece manifold is available. Please see *Clutch and hose port options* on page 12.

**Service valves**

A low-side service valve is fitted to the top.

**Oil return and other ports**

An oil return port is not fitted.

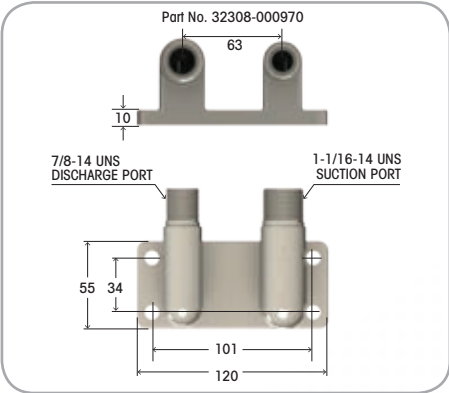
R134a refrigerant		
Compressor	Oil	Mounting
UNX380	PAG56 or POE68 (600 ml)	Denso 10P30C compatible

Clutch and hose port options

Clutches available for Unicla 330-380 Series Compressors

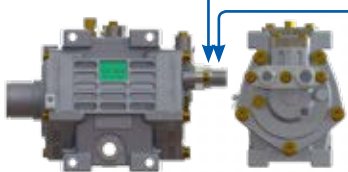
330-380 Series							
Type	158	168	178	210	12V	24V	HDC
AA-Groove		✓			✓	✓	
B-Groove							
BB-Groove		✓	✓	✓	✓	✓	✓
M-Groove	✓						
6-Groove							
8-Groove		✓		✓			✓

Single piece hose port manifold available for UN330, UNX330, UN380 and UNX380



Hose port manifold options for UM/UX 300 Series Compressors

90° Rear Single Piece Pad Mount (Aluminium)

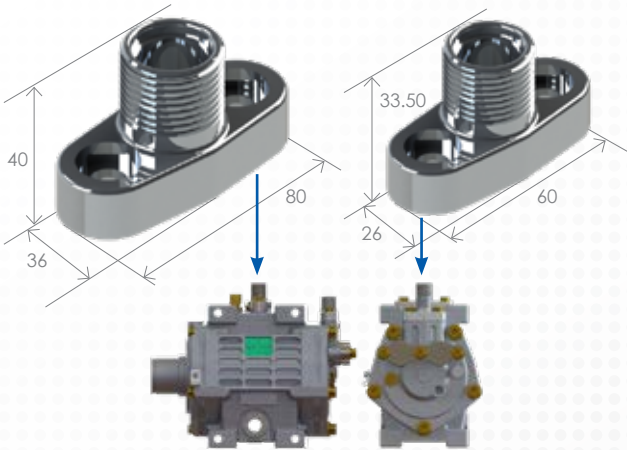


**Discharge**  
#10 MIOR (7/8-14)  
**Suction**  
#12 MIOR (1-1/16-14)  
Manifold Part No. 32308-000541

Vertical Top Pad Mount (Aluminium)

**Suction**  
#12 MIOR (1-1/16-14)  
Part No. 32308-000120

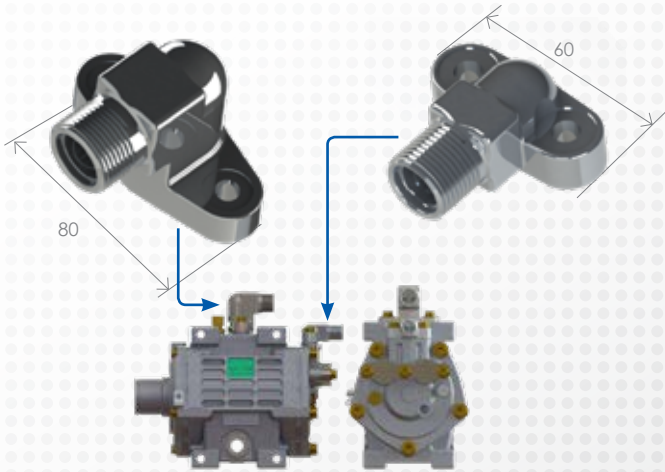
**Discharge**  
#10 MIOR (7/8-14)  
Part No. 32308-000100



90° Top Pad Mount (Coated Cast Iron)

**Suction**  
#12 MIOR (1-1/16-14)  
Part No. 32308-000430

**Discharge**  
#10 MIOR (7/8-14)  
Part No. 32308-000421





# B Group

## UWX Series Compressors



## B Group UWX Series Compressors

### Features

Unicla achieved global recognition for developing the world's first 14-cylinder swashplate compressors with its UWX models, which are built for bus, coach and any commercial applications requiring a large open-drive compressor capacity with lightweight and compact features.

Since then the compressors have undergone significant changes and refinements to make the latest fourth-generation models more robust and durable in a wider variety of applications and conditions.

The UWX compressors come in 508 cc (440 series), 607 cc (550 series) and 675 cc (660 series) capacities. Each weighs just 25.4 kg, with impressively compact dimensions of 324 mm (l) x 188 mm (w) x 303 mm (h). Specific models are available for R134a, R404a and R452a refrigerants. They can be supplied pre-charged with polyalkaline glycol (PAG) or polyol ester (POE) oil.

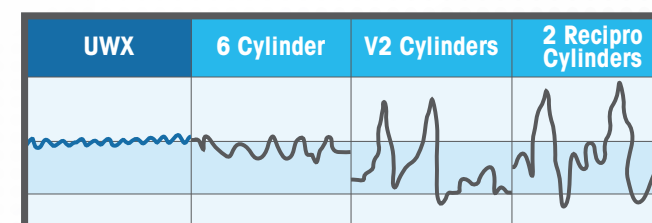
The compressors have a remarkably smooth and quiet operation with the lowest vibration level from any compressors of this size in the market today. With the current demands of modern transport, these compressors allow system designers to meet the most stringent environmental and efficiency requirements.

The UWXF model compressors have been upgraded internally to better suit R404a and R452a low-temperature refrigerants. Features include higher-gauge reed valves, a further refined and polished swashplate and RL32 polyol ester (POE) oil.

Other key features include:

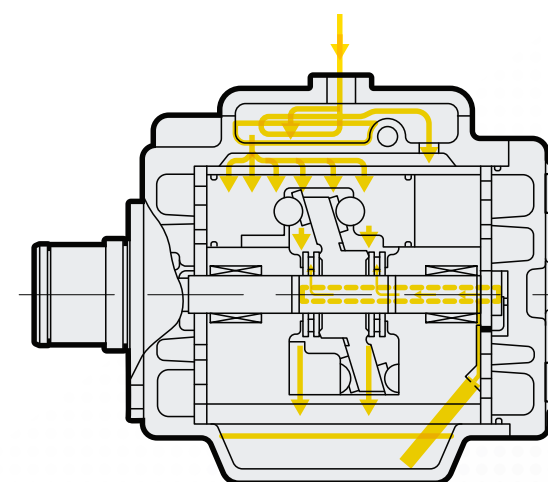
### Smooth operation

Typical vibration analysis compared with other compressor types.



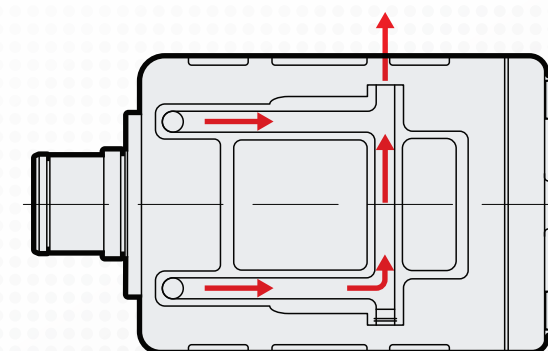
### Superior lubrication system

Superior lubrication is achieved by supplying oil to the large swashplate area through two oil chambers. The lower chamber is a traditional sump that feeds an oil pump driven from the rear of the crankshaft, and oil is supplied through the centre of the crankshaft onto the thrust bearings and swashplate. The upper chamber is situated at the suction entry point and features a series of baffles that collect the incoming oil and redirect it directly onto the top of the moving swashplate. Please see the diagram below.



### Crossover chamber

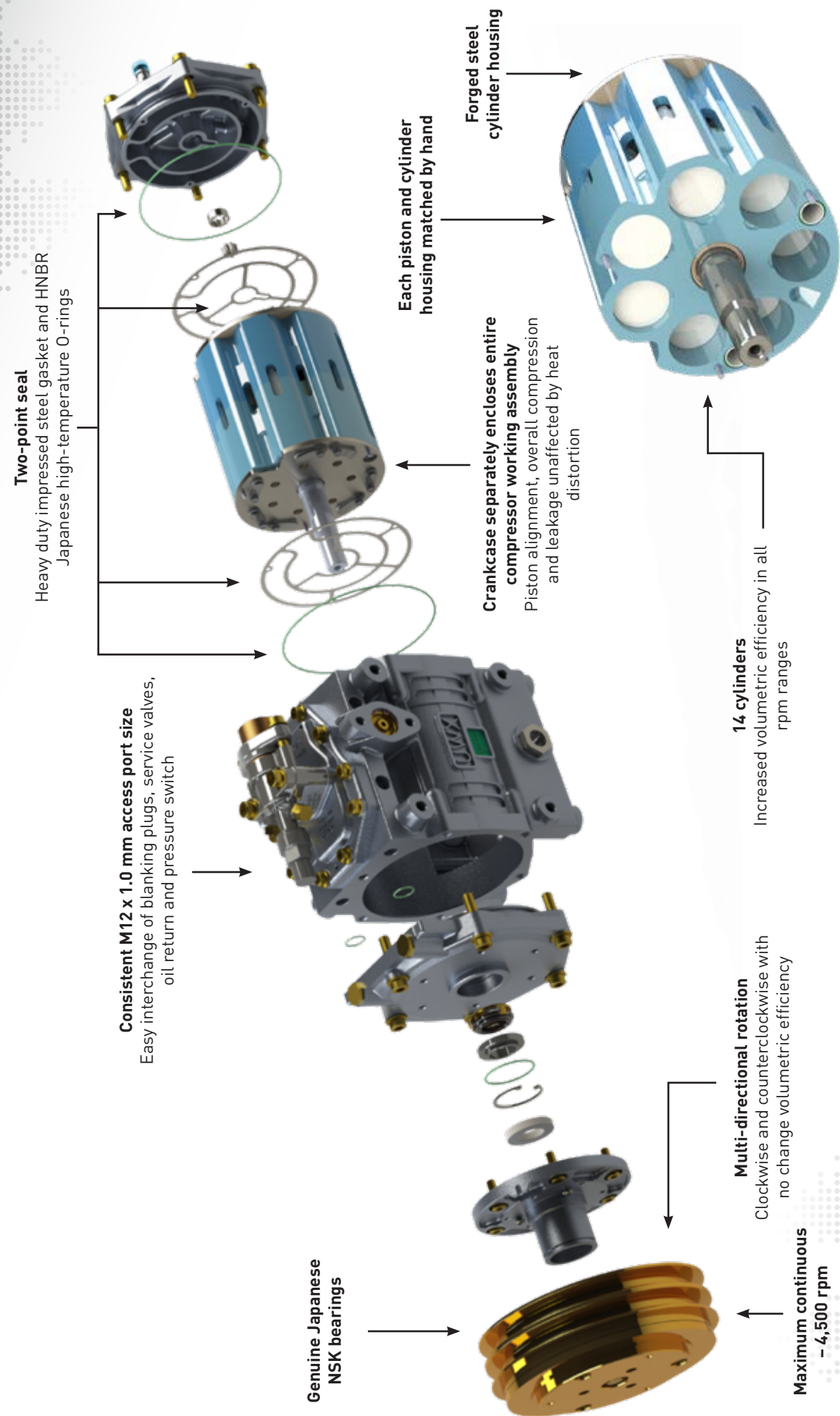
UWX compressors have a unique discharge gas crossover chamber situated at the top of the crankcase, which surrounds the oil chamber carrying incoming suction gas. As the discharge gas flows through the area, sufficient heat is transferred into the suction side to protect the compressor from momentary liquid flooding. The superheat supplied from the crossover chamber is sufficient to convert this liquid refrigerant into a vapour state. Please see the diagram below.





# Unicla

## Advantages UWX Series Compressors



## UWX | UWXF 440



### Features

- Unicla 14-cylinder swashplate
- Suitable for refrigeration and air-conditioning applications with a system capacity requirement of **16-24 kW**
- Displacement: **508 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation
- High in capacity (508 cc), low in weight (25.4 kg) with compact dimensions of 324 mm x 188 mm x 303 mm
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Unicla Multi Direct Mounting (MDM)
- Refrigerants: R134a, R404a, R452a
- Pre-charged with PAG or POE oil
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system provides a total of 12 mounting points (four on the left, right and bottom sides). Each mounting point has an M12 x 1.75 mm threaded hole, providing excellent flexibility in engine mounting and bracket design.

### Hose ports

The suction port is located on top of the compressor and the discharge port can be taken from either the left or right side. Both ports are fitted with a shut-off manifold assembly with back seating capability via stem valves.

### Service valves

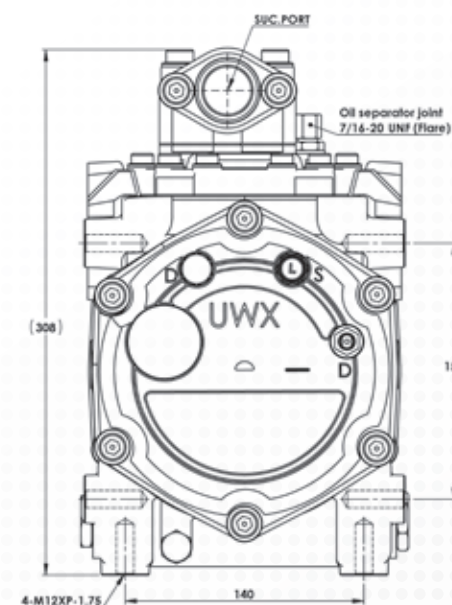
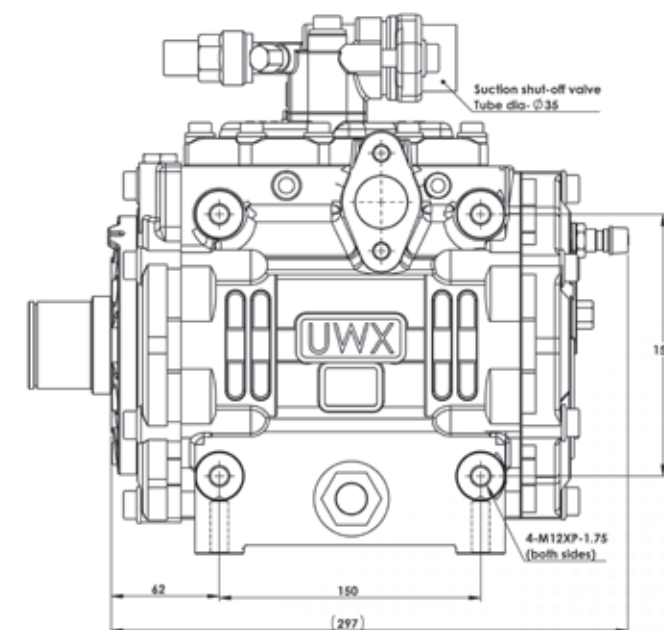
Low- and high-side service valves are fitted on the shut-off manifolds, and on the rear cap of the compressor.

### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000050) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.



R134a refrigerant		
Compressor	Oil	Mounting
UWX440	PAG56 or POE68 (900 ml)	Direct (all sides)
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UWXF440	POE32 (900 ml)	Direct (all sides)



# UWX | UWXF 550



### Features

- Unicla 14-cylinder swashplate
- Suitable for refrigeration and air-conditioning applications with a system capacity requirement of **18-28 kW**
- Displacement: **607 cc/rev**
- Maximum continuous: **4,500 rpm**
- Smooth and quiet operation
- High in capacity (607 cc), low in weight (25.4 kg) with compact dimensions of 324 mm x 188 mm x 303 mm
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Unicla Multi Direct Mounting (MDM)
- Refrigerants: R134a, R404a, R452a
- Pre-charged with PAG or POE oil
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system provides a total of 12 mounting points (four on the left, right and bottom sides). Each mounting point has an M12 x 1.75 mm threaded hole, providing excellent flexibility in engine mounting and bracket design.

### Hose ports

The suction port is located on top of the compressor and the discharge port can be taken from either the left or right side. Both ports are fitted with a shut-off manifold assembly with back seating capability via stem valves.

### Service valves

Low- and high-side service valves are fitted on the shut-off manifolds, and on the rear cap of the compressor.

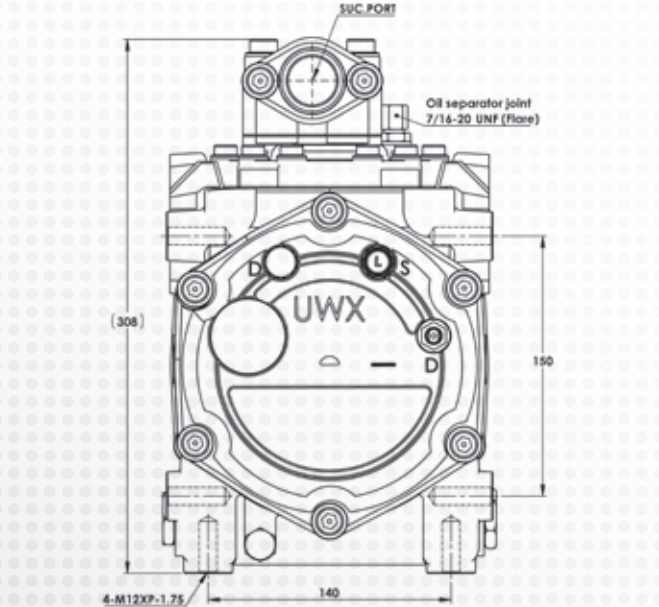
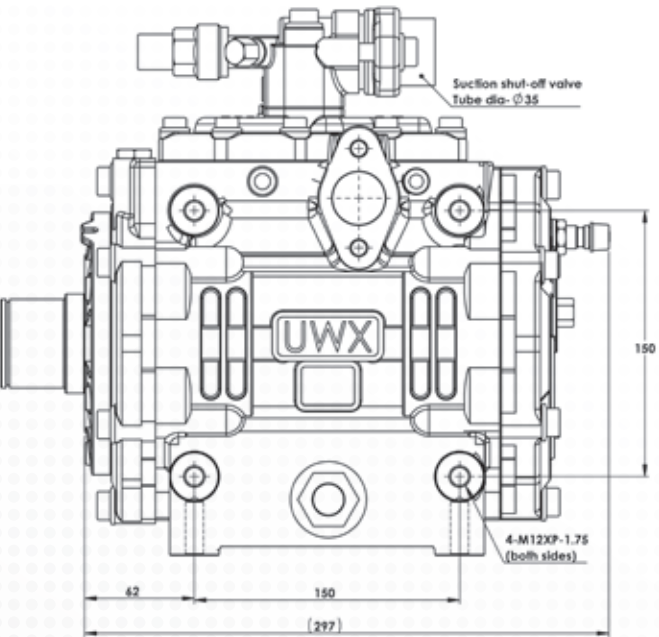
### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000050) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.

R134a refrigerant		
Compressor	Oil	Mounting
UWX550	PAG56 or POE68 (900 ml)	Direct (all sides)
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UWXF550	POE32 (900 ml)	Direct (all sides)



# UWX | UWXF 660



### Features

- Unicla 14-cylinder swashplate
- Suitable for refrigeration and air-conditioning applications with a system capacity requirement of **20-32 kW**
- Displacement: **675 cc/rev**
- Maximum continuous: **4500 rpm**
- Smooth and quiet operation
- High in capacity (675cc), low in weight (25.4 kg) with compact dimensions of 324 mm x 188 mm x 303 mm
- Clockwise and counterclockwise rotation with no change in volumetric efficiency
- Heavy duty impressed steel gasket and HNBR Japanese high-temperature O-ring (two-point seal)
- Forged steel cylinder housing
- Drop-forged 5050 aluminium pistons with synthetic PTFE heat-treated rings
- Unicla Multi Direct Mounting (MDM)
- Refrigerants: R134a, R404a, R452a
- Pre-charged with PAG or POE oil
- Genuine NSK bearings throughout

### Mounting

The Multi Direct Mounting system provides a total of 12 mounting points (four on the left, right and bottom sides). Each mounting point has an M12 x 1.75 mm threaded hole, providing excellent flexibility in engine mounting and bracket design.

### Hose ports

The suction port is located on top of the compressor and the discharge port can be taken from either the left or right side. Both ports are fitted with a shut-off manifold assembly with back seating capability via stem valves.

### Service valves

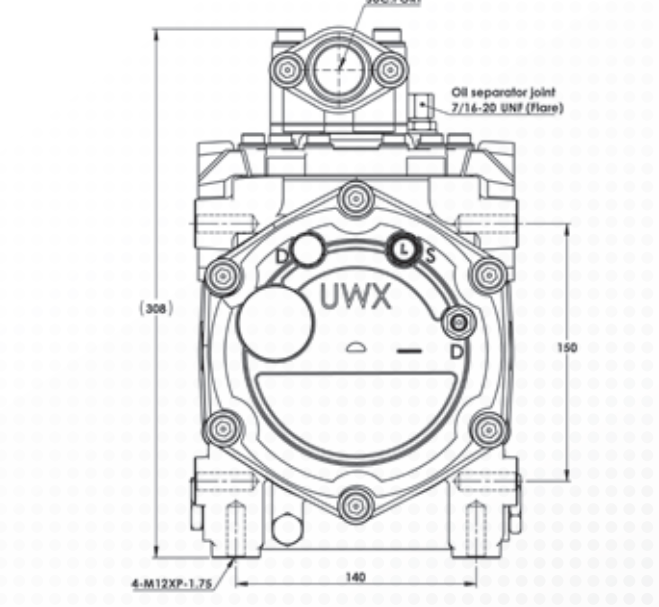
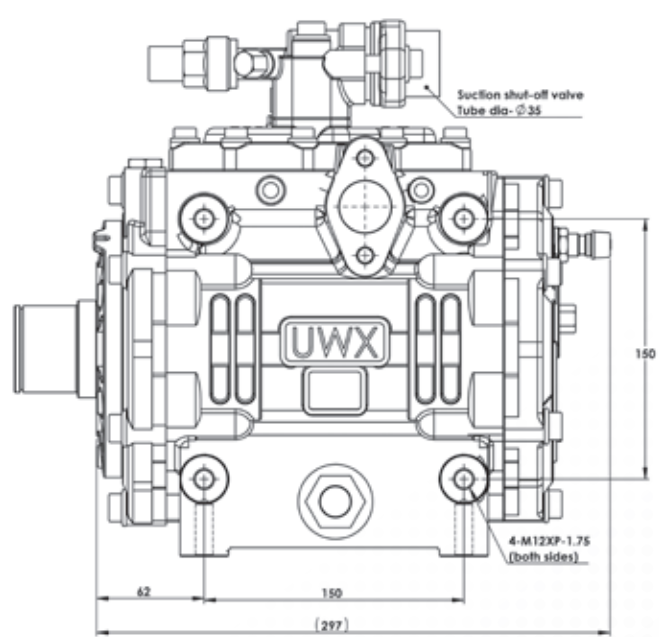
Low- and high-side service valves are fitted on the shut-off manifolds, and on the rear cap of the compressor.

### Oil return

An oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160) – is fitted on top of the compressor. It has a unique flow design suited to the Unicla oil separator (Part No. OS000050) and is interchangeable with the low-side service valve.

### Other ports and fittings

Consistent M12 x 1.0 mm access port size. Easy interchange of blanking plugs, service valves, oil return and pressure switch fittings.



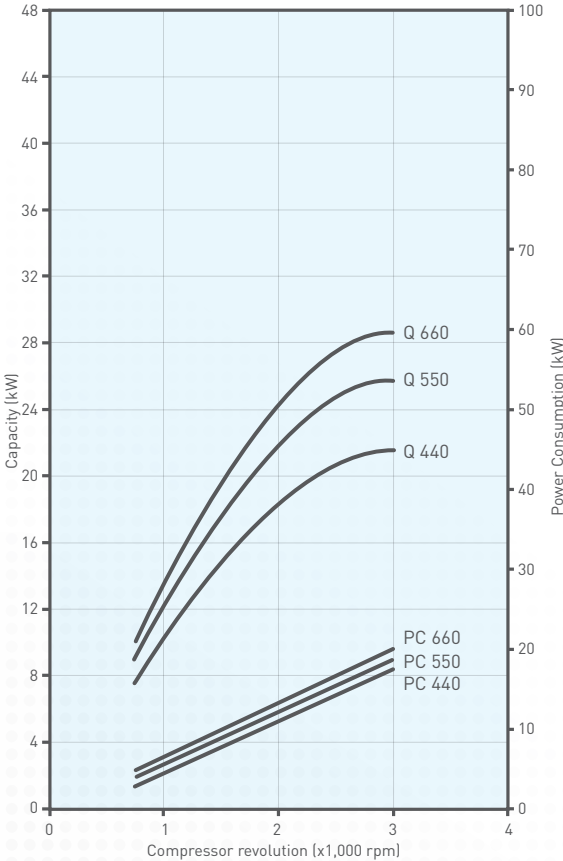
R134a refrigerant		
Compressor	Oil	Mounting
UWX660	PAG56 or POE68 (900 ml)	Direct (all sides)
R404a   R452a refrigerant		
Compressor	Oil	Mounting
UWXF660	POE32 (900 ml)	Direct (all sides)



Performance graphs and clutch options

440-550-660 Series  
Performance  
- R134a refrigerant

Condition 1

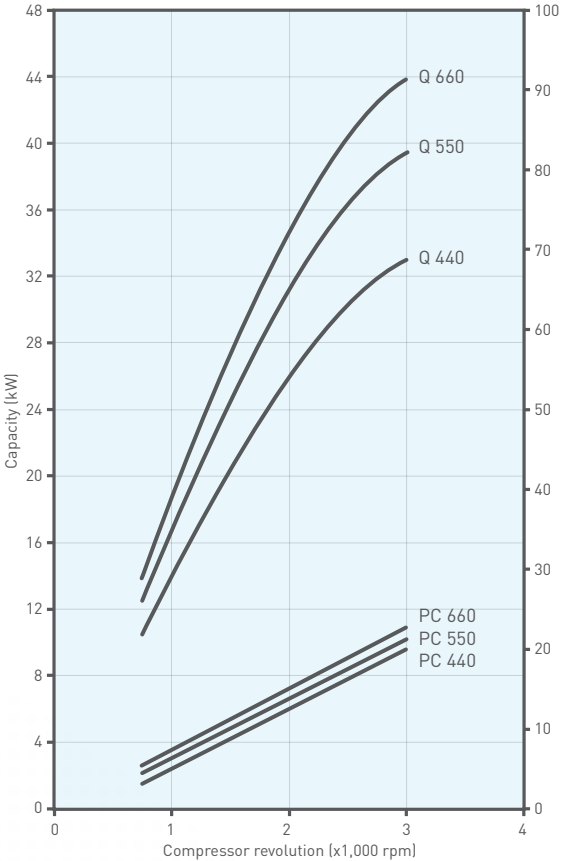


\*Based on 9°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	1.82 bar
Evaporating temperature	-1°C

440-550-660 Series  
Performance  
- R134a refrigerant

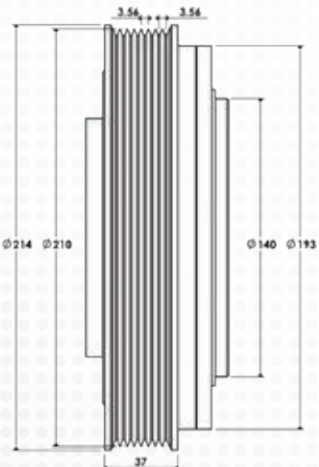
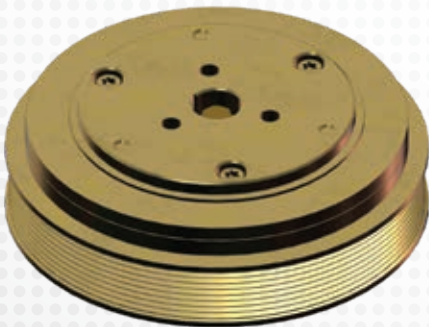
Condition 2



\*Based on 15°C suction vapour temperature and 5°C subcooling.  
Q - Cooling capacity  
PC - Power Consumption

Conditions*	
Discharge pressure	15.2 bar
Condensing temperature	58°C
Suction pressure	2.49 bar
Evaporating temperature	5°C

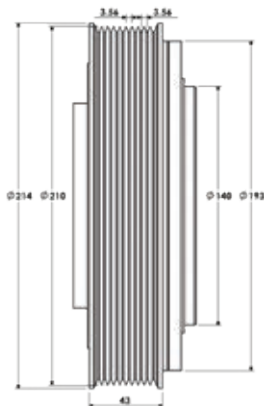
210-8PG-HD



Rated voltage	12/24V DC
Static friction torque	≥ 280 Nm
Power consumption	≤ 60 W
Max speed	4500 rpm

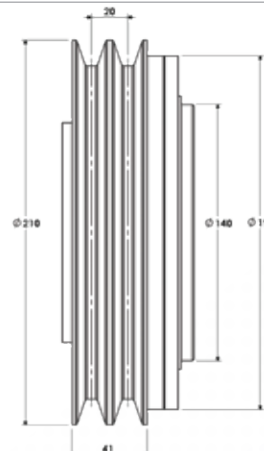
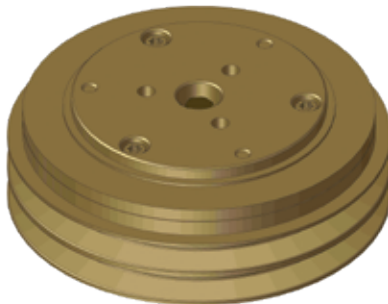
Clutch options

210-10PG-HD



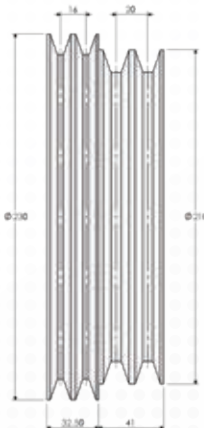
Rated voltage	12/24V DC
Static friction torque	≥ 280 Nm
Power consumption	≤ 60 W
Max speed	4500 rpm

210-BB-HD



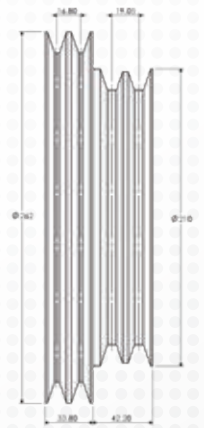
Rated voltage	12/24V DC
Static friction torque	≥ 280 Nm
Power consumption	≤ 60 W
Max speed	4500 rpm

230AA-210BB-HD



Rated voltage	12/24V DC
Static friction torque	≥ 240 Nm
Power consumption	≤ 62 W
Max speed	4500 rpm

262AA-210BB-HD



Rated voltage	12/24V DC
Static friction torque	≥ 240 Nm
Power consumption	≤ 62 W
Max speed	4500 rpm



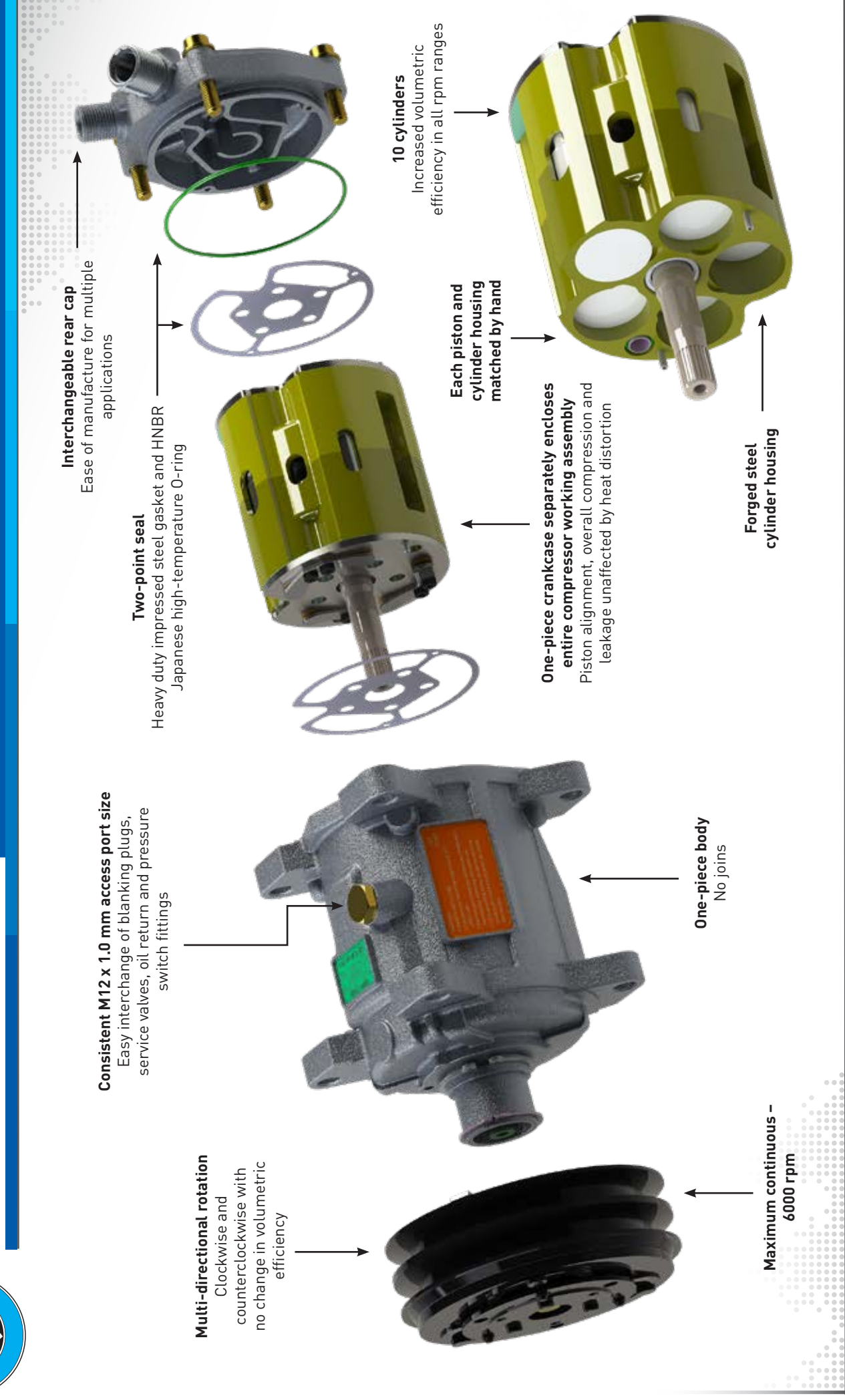
# D Group

## Heavy Duty OE Replacement Compressors



# Uniola

## Advantages 45-200 Series Compressors



UP150-3780



Application

Kenworth truck with ear mount.

Service valves

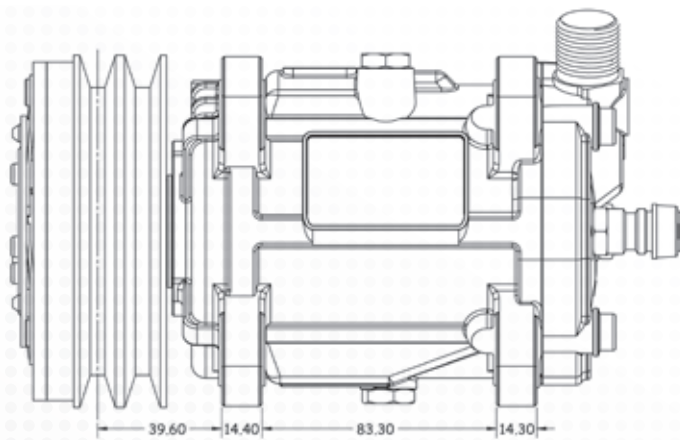
Low- and high-side service valves are standard SAE J639 compliant R134a couplers and can be removed if required and replaced with blanking plug (Part No. 13201-000010). A high-pressure relief valve is also fitted.

Fitting options

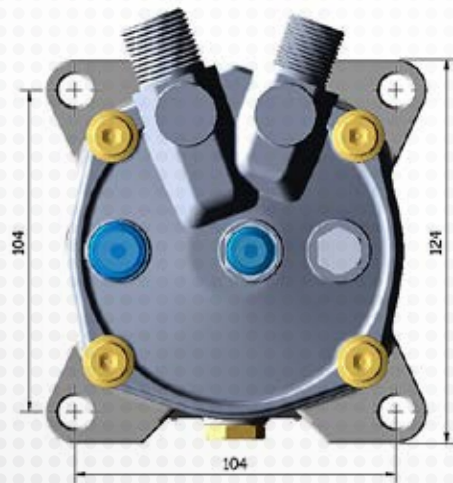
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

Hose ports

Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	UP150
Part number	UP150-3780
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001890
Rating	12V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	125 mm
Armature No.	27206-000021

UP150-6150



Application

Universal applications with ear mount.

Service valves

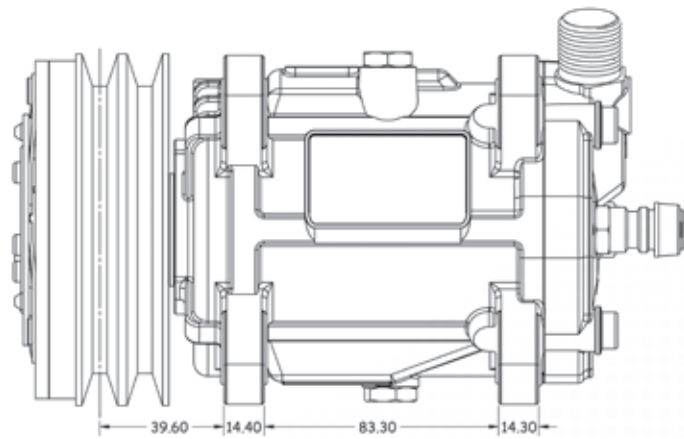
Low- and high-side service valves are standard SAE J639 compliant R134a couplers and can be removed if required and replaced with blanking plug (Part No. 13201-000010).

Fitting options

The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

Hose ports

Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	UP150
Part number	UP150-6150
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27201-00080
Rating	12V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	132 mm
Armature No.	27206-000021



# UP150-4446



**Application**

Isuzu F series, N series  
Scania P113H, 113M, P92M

**Service valves**

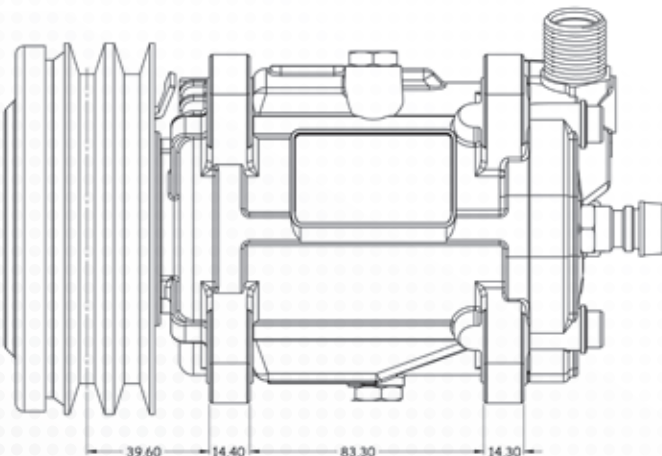
Low- and high-side service valves are standard SAE J639 compliant R134a couplers and can be removed if required and replaced with blanking plug (Part No. 13201-000010).

**Fitting options**

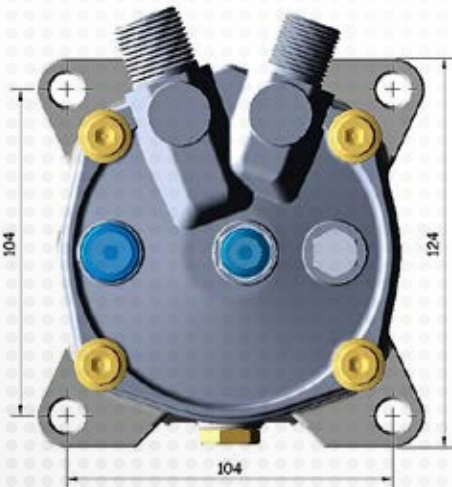
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**

Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	UP150
Part number	UP150-4446
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27201-00230
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	132 mm with dust cover
Armature No.	27206-000021

# US150-4745



**Application**

Kenworth with direct mount.

**Service valves**

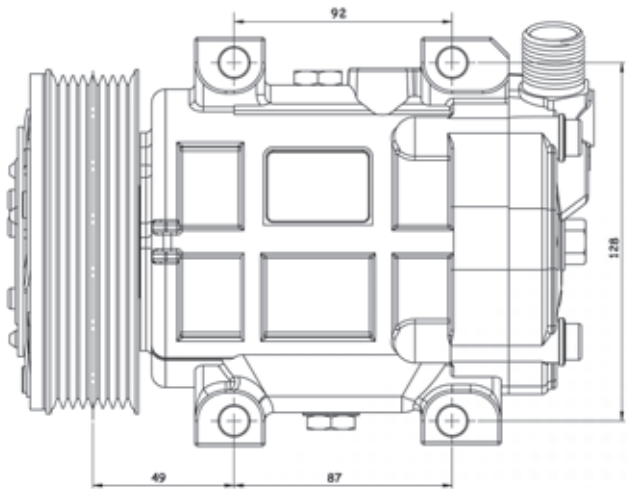
High-pressure relief valve fitted, service valves not fitted.

**Fitting options**

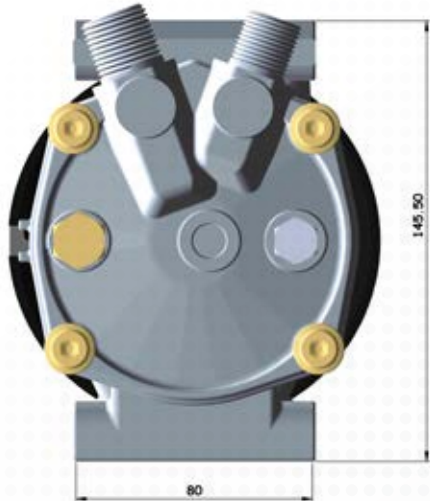
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**

Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	US150
Part number	US150-4745
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001400
Rating	12V DC, MAX 45W
Revolution	CW/CCW
Belt type	8PK
Pulley diameter	119 mm
Armature No.	27206-000021

UP150-6157



Application

Universal applications with ear mount.

Service valves

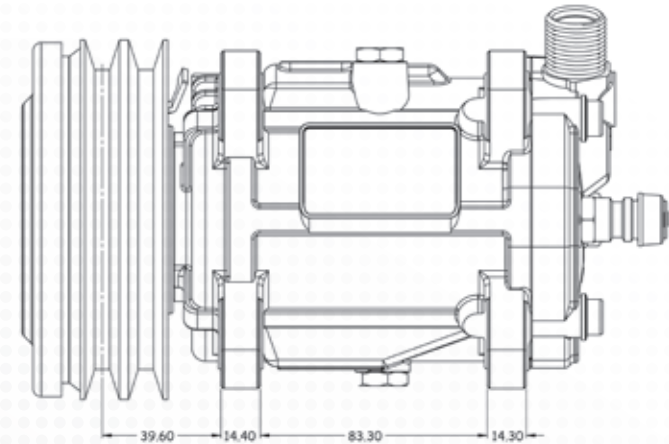
Low- and high-side service valves are standard SAE J639 compliant R134a couplers and can be removed if required and replaced with blanking plug (Part No. 13201-000010).

Fitting options

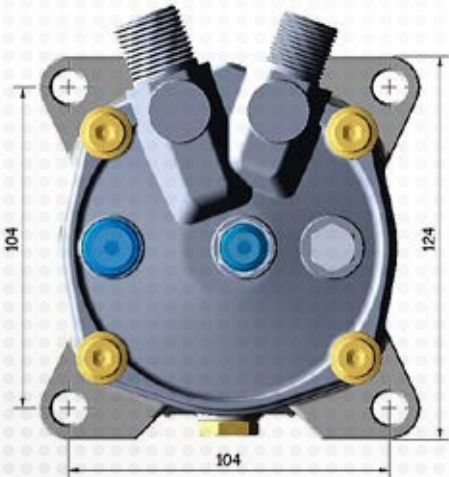
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

Hose ports

Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	UP150
Part number	UP150-6157
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27201-00080
Rating	12V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	132 mm with dust cover
Armature No.	27206-000021

UP150-6200



Application

Universal applications with ear mount.

Service valves

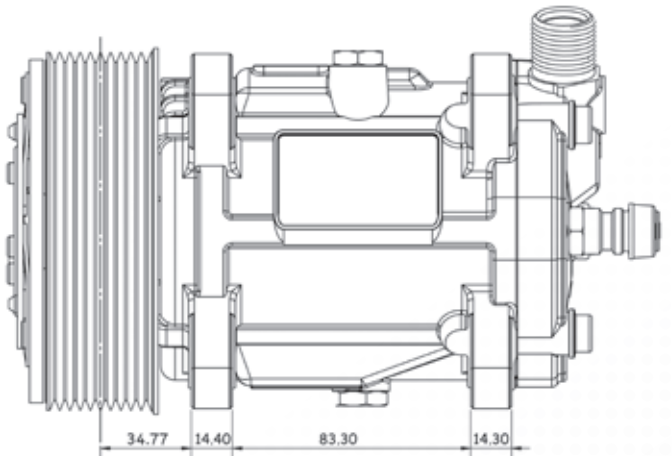
Low- and high-side service valves are standard SAE J639 compliant R134a couplers and can be removed if required and replaced with blanking plug (Part No. 13201-000010).

Fitting options

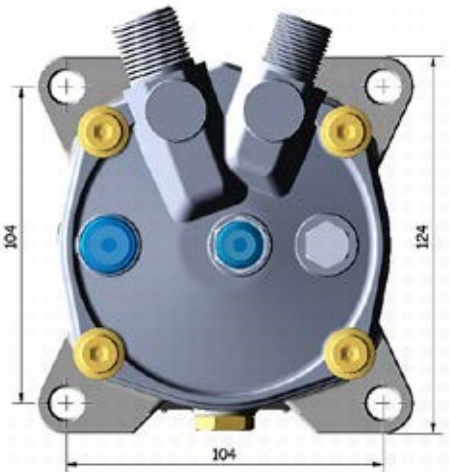
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

Hose ports

Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	UP150
Part number	UP150-6200
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001200
Rating	12V DC, MAX 45W
Revolution	CW/CCW
Belt type	10PK
Pulley diameter	125 mm
Armature No.	27206-000021



# UP150-7325

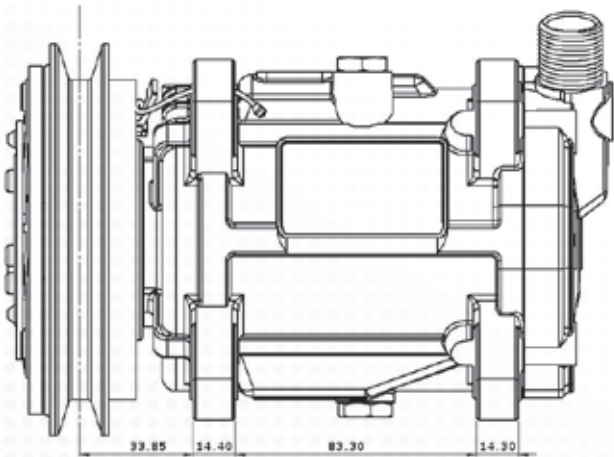


**Application**  
Sandvik F9C, L7 Drills and universal applications.

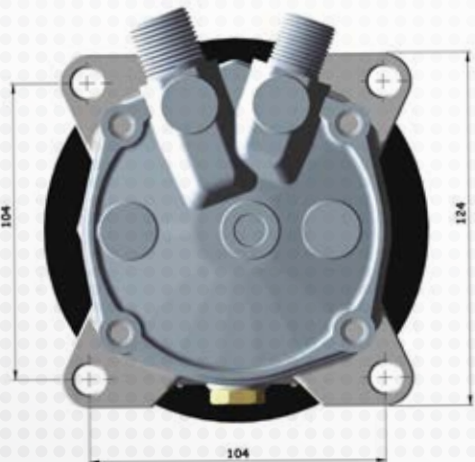
**Service valves**  
Service and high-pressure relief valves are not fitted.

**Fitting options**  
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**  
Vertical O-ring hose fittings are located on the rear of the compressor. The suction port is 7/8-14 UNF (#10) and the discharge port is 3/4-16 UNF (#8).



Compressor	
Model	UP150
Part number	UP150-7325
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	VOR
Fitting type	Suction port – 7/8-14 UNF Discharge port – 3/4-16 UNF
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001870
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	B
Pulley diameter	146 mm
Armature No.	27206-000021

# UP150-7335

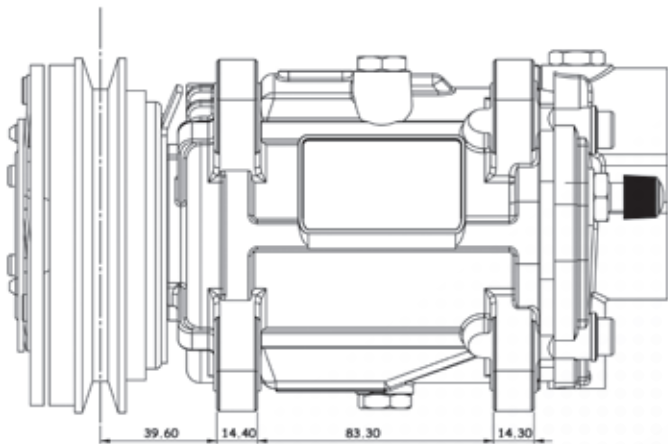


**Application**  
Caterpillar graders, dump trucks, scrapers, dozers and loaders with ear mount.

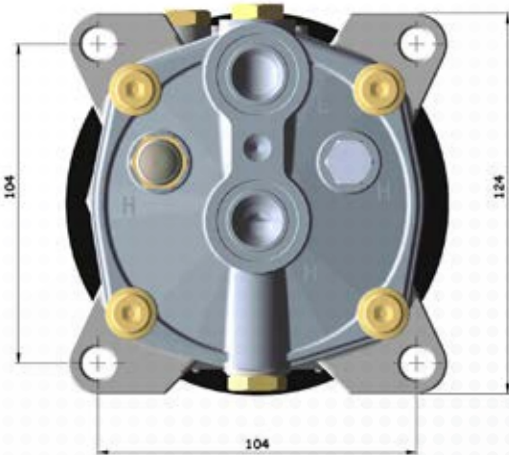
**Service valves**  
A 7/16-20 UNF male flare with valve core is fitted for high-side pressure switch access (Part No. 42203-000150). A high-pressure relief valve is fitted. Service valves are not fitted.

**Fitting options**  
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**  
GM pad type ports are placed horizontally (outward) from the rear cap in a vertical position, with the suction port on top. The suction port is 13 mm ID and the discharge port is 10 mm ID.



Compressor	
Model	UP150
Part number	UP150-7335
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	GM Pad
Fitting type	Pad O-ring
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001880
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	138.5 mm
Armature No.	27206-000021

UP150-7355



Application

Case IH tractors.

Service valves

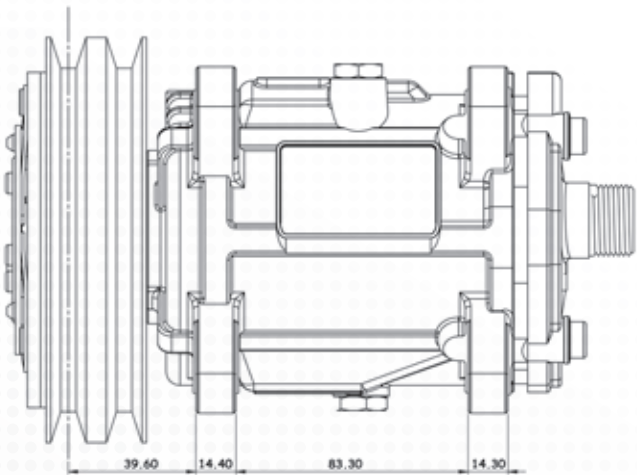
Service and high-pressure relief valves are not fitted.

Fitting options

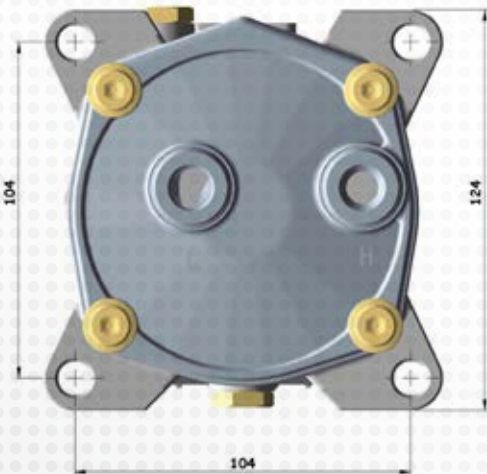
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

Hose ports

Tube O-ring type ports are located horizontally, facing outward from the rear cap. Both suction and discharge port connections are 1-14 UNS.



Compressor	
Model	UP150
Part number	UP150-7355
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	HTO
Fitting type	Tube O-ring
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001900
Rating	12V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	152 mm with dust cover
Armature No.	27206-000021

US150-7365



Application

Volvo truck and bus.

Service valves

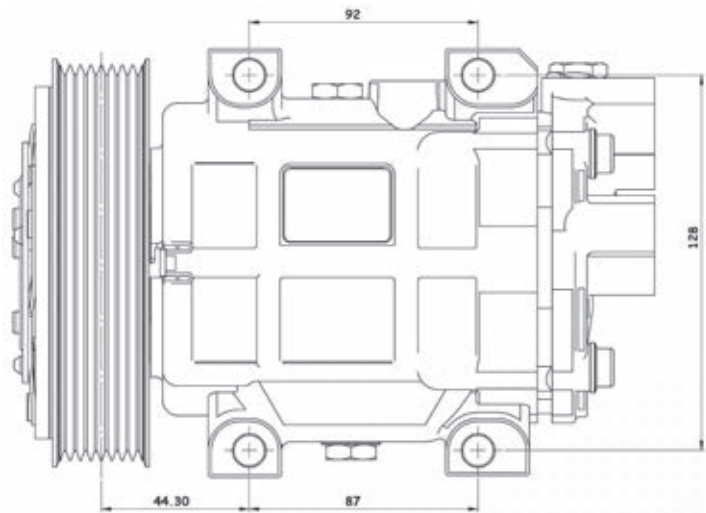
Service and high-pressure relief valves are not fitted.

Fitting options

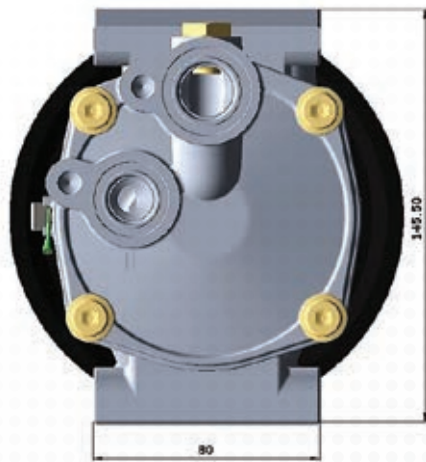
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

Hose ports

Special horizontal pad type ports face outward from the rear cap, on the left side of the compressor.



Compressor	
Model	US150
Part number	US150-7365
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	Individual Pad
Fitting type	Pad O-ring
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001910
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	8PK
Pulley diameter	132 mm with dust cover
Armature No.	27206-000021



# US150-7375

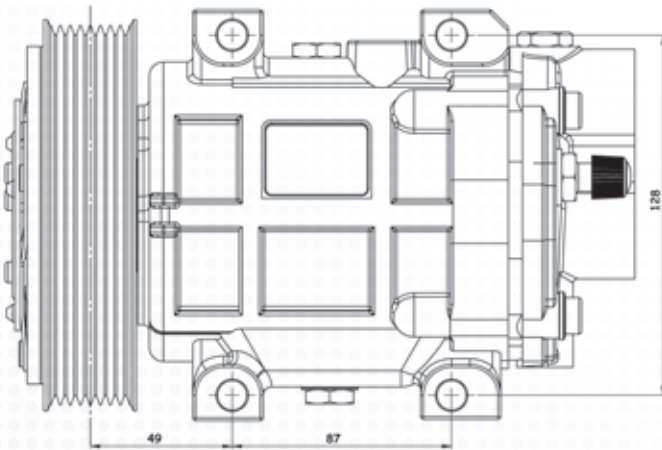


**Application**  
Caterpillar graders, dump trucks, scrapers, dozers and loaders with direct mount.

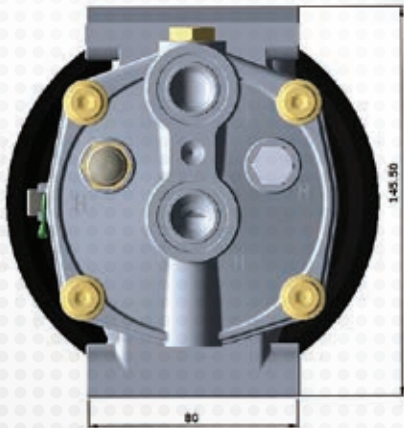
**Service valves**  
7/16-20 UNF male flare with valve core is fitted for high-side pressure switch access (Part No. 42203-000150). A high-pressure relief valve is fitted. Service valves are not fitted.

**Fitting options**  
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**  
GM pad type ports are placed horizontally (outward) from the rear cap in a vertical position, with the suction port on top. The suction port is 13 mm ID and the discharge port is 10 mm ID.



Compressor	
Model	US150
Part number	US150-7375
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	GM Pad
Fitting type	Pad O-ring
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001920
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	8PK
Pulley diameter	133 mm
Armature No.	27206-000021

# US150-7385

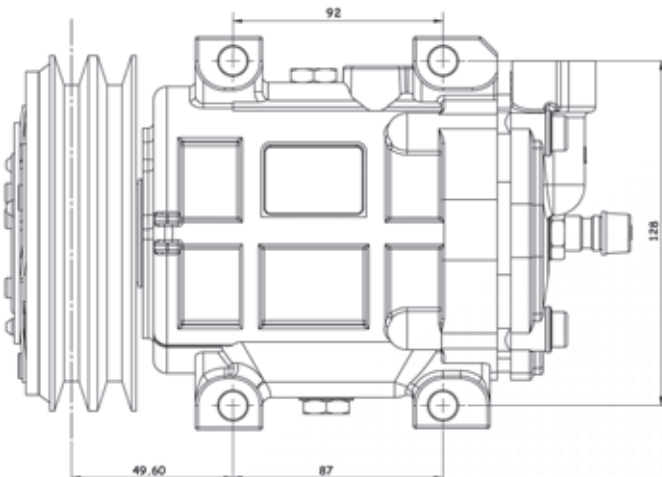


**Application**  
Isuzu N series with direct mount.

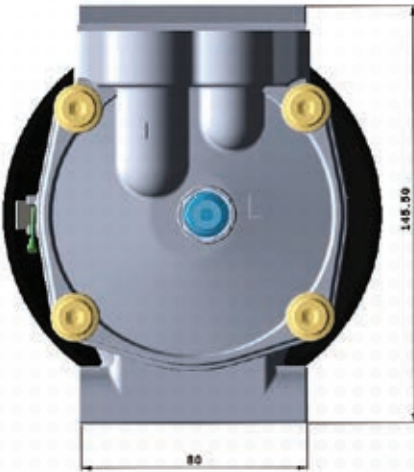
**Service valves**  
Low-side service valve is standard SAE J639 compliant R134a coupler and can be removed if required and replaced with blanking plug (Part No. 13201-000010).

**Fitting options**  
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**  
Common pad type ports are placed vertically facing upward from the rear cap. The suction port is 13 mm ID and the discharge port 10 mm ID.



Compressor	
Model	US150
Part number	US150-7385
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	Top Pad
Fitting type	Pad O-ring
Initial oil charge	160 cc



Clutch set	
Part No.	27205-001930
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	A
Pulley diameter	132 mm
Armature No.	27206-000021

# UV150-7615



**Application**

Hitachi excavators ZX2000, ZX200LC.

**Service valves**

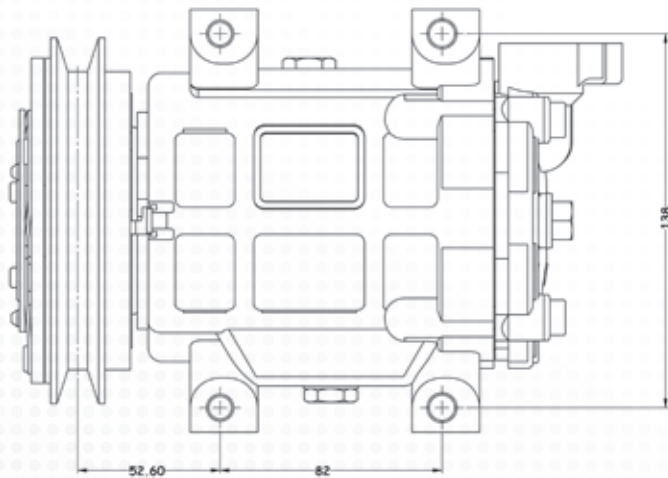
A high-pressure relief valve is fitted. Service valves are not fitted.

**Fitting options**

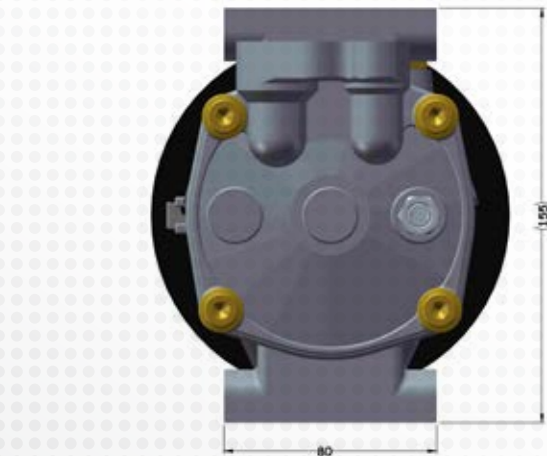
The top-mounted blanking plug is interchangeable with an oil return fitting – 7/16-20 UNF male flare (Part No. 42203-000160).

**Hose ports**

Special pad type ports are placed vertically facing upward from the rear cap.



Compressor	
Model	UV150
Part number	UV150-7615
Displacement	145 cc/rev
Max RPM	6,000 rpm
Rear cap	Vertical pad
Fitting type	Pad O-ring
Initial oil charge	160 cc



Clutch set	
Part No.	27201-00470
Rating	24V DC, MAX 45W
Revolution	CW/CCW
Belt type	B
Pulley diameter	135 mm
Armature No.	27206-000021

# Application chart

Part Number	Application	Clutch	End Cap	Oil
UP150-3780	Kenworth with Ear Mount	12V 125 mm AA	VOR #8, #10 with HPRV	160 ml PAG
UP150-6150	Universal Applications, Ear Mount	12V 132 mm AA	VOR #8, #10	160 ml PAG
UP150-4446	Isuzu F, N series, Scania P113H, 113M, P92M	24V 132 mm AA with dust cover	VOR #8, #10	160ml PAG
US150-4745	Kenworth with Direct Mount	12V 119 mm 8PV	VOR #8, #10	160 ml PAG
UP150-6157	Universal Applications, Ear Mount	12V 132 mm AA with dust cover	VOR #8, #10	160ml PAG
UP150-6200	Universal Applications, Ear Mount	12V 125 mm 10PV	VOR #8, #10 with HPRV	160 ml PAG
UP150-7325	Sandvik F9C, L7 Drills and Universal Applications	24V 146 mm 1B	VOR #8, #10	160 ml PAG
UP150-7335	Caterpillar Graders, Dump Trucks, Scrapers, Dozers, Loaders with Ear Mount	24V 138.5 mm 1A	Horizontal Pad (GM) with HPRV	160 ml PAG
UP150-7355	Case IH Tractors	12V 152 mm AA with dust cover	HTO Fittings	160 ml PAG
US150-7365	Volvo Truck and Bus	24V 132 mm 8PV with dust cover	Horizontal Pad	160ml PAG
US150-7375	Caterpillar Graders, Dump Trucks, Scrapers, Dozers, Loaders with Direct Mount	24V 133 mm 8PV	Horizontal Pad (GM) with HPRV	160 ml PAG
US150-7385	Isuzu N Series Direct Mount	24V 132 mm AA	Vertical Pad to suit Isuzu	160 ml PAG
UV150-7615	Hitachi Excavators ZX200, ZX200LC	24V 135 mm 1B	Vertical Pad to suit Hitachi	160 ml PAG





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