

OIL FREE COMPRESSORS



The oil free compressors are suitable for LPG, coolers, ammonia, DME, CFC, HCFC, methylamine, dimethylamine, SF₆, etc.

MAIN FEATURES

TIGHT compressors combine sturdiness and small dimensions in order to provide the maximum performance in the compression of technical gases, for stationary or transport uses.

TIGHT produces single-stage, two-stage or dual-seal compressors depending on the product to be treated. The maximum working pressure is 18 barg for single stage and 20 barg for two-stage compressors (35 barg by request with special seals).

THE PRINCIPAL CHARACTERISTICS OF COMPRESSORS TIGHT:

- Oil-free compressors
- Twin-cylinder, positive-displacement, reciprocating compressors
- Pump induced lubrication
- Treated pistons in light alloy
- Special system with self-lubricating seals
- Chromium plated piston rods made of hardened carbon steel
- Crossheads made of special aluminium alloy
- Connecting rods with sliding friction bearings
- Oil sump

ADVANTAGES OF THE COMPRESSORS TIGHT

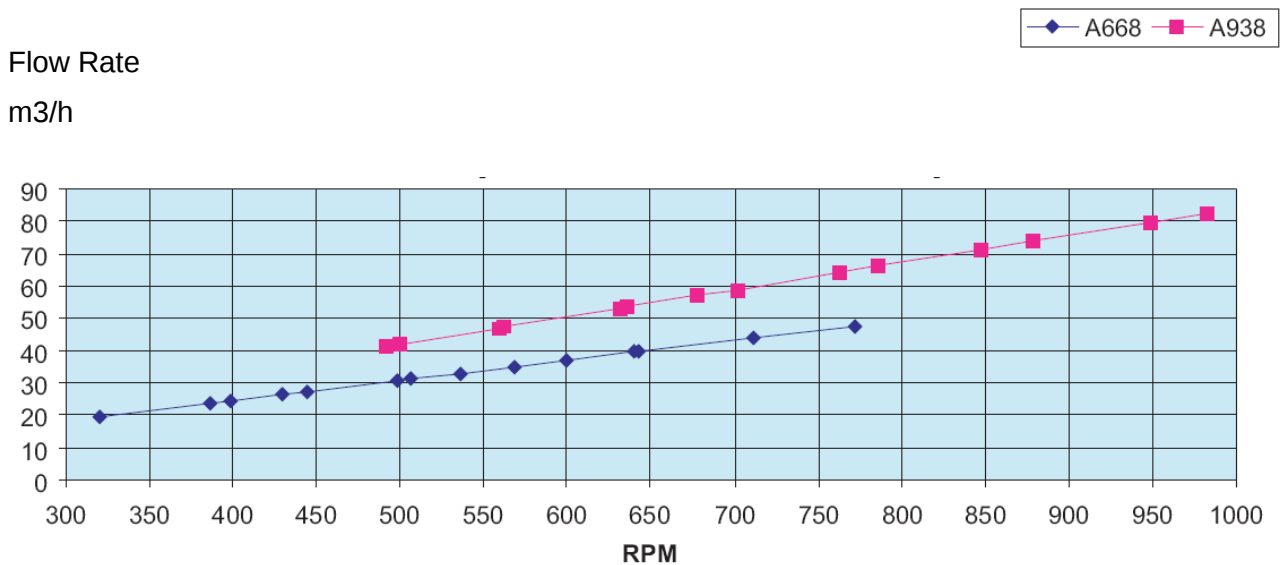
- Connection to the pipe by flanges or welded connections to minimize the risk of leakage
- Lack of threaded pipe connections
- 4-way valve installed in the block with flanged connection
- Compact arrangement for easy installation and service
- Mechanical trap for the liquid with a stop valve located in non-pressurized closure (PED certificate)
- Steel base with supports to reduce vibration
- 2 year warranty
- Tight compressors have all certifications required by European standards:
 - ISO 9001
 - PED 97/23/EC certification
 - Certification II 2 G T3 ATEX 94/9/EC
 - Directive 98/73/EC

TIGHT oil-free compressors can handle a full range of air and technical gases without oil contamination.

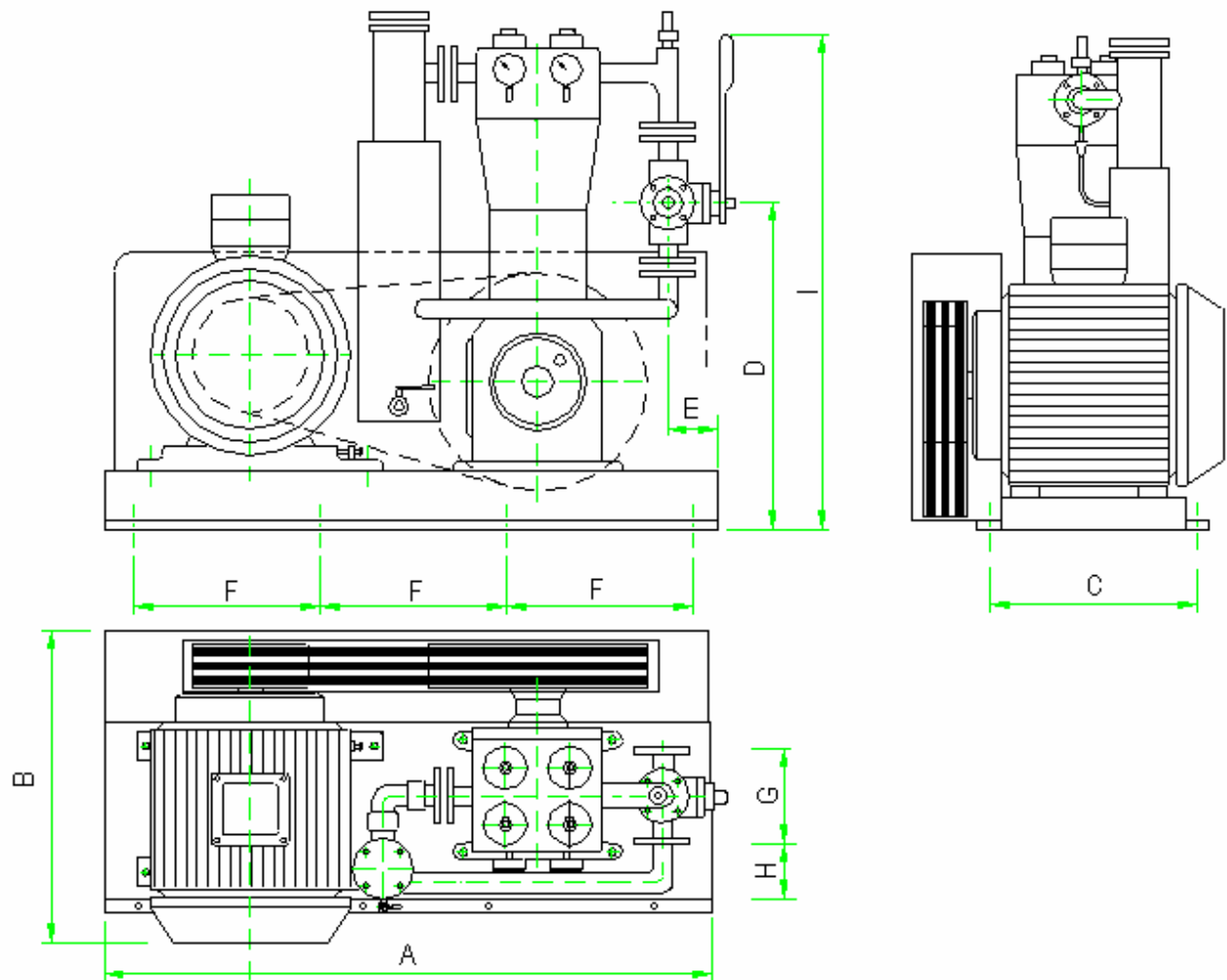
Compressor Range

	SINGLE STAGE						TWO STAGE			
MODEL	TIGHT 32	TIGHT 48	TIGHT 60	TIGHT 80	TIGHT 100	TIGHT 108	TIGHT DS16	TIGHT DS24	TIGHT DS40	TIGHT DS55
Power (kW)	5.5	7.5	11	18.5	22	22	5,5	7,5	11	15
Compressor	A668	A668	A668	A938	A938	A938	A668	A668	A938	A938
Bore-Stroke [mm]	108x73	108x73	108x73	120x83	120x83	120x83	ØxL	ØxL	ØxL	ØxL
1 ST Stage [mm] ØxL							108x73	108x73	120x83	120x83
2 ST Stage [mm] ØxL							63x73	63x73	74x83	74x83
RPM	400	580	730	710	890	975	400	580	710	890
Piston Displacement	32 m ³ /h	48 m ³ /h	60 m ³ /h	80 m ³ /h	100 m ³ /h	108 m ³ /h	16 m ³ /h	24 m ³ /h	40 m ³ /h	50 m ³ /h
Max Working Press.	25	25	25	25	25	25	25	25	25	25

Compressors Performances



DIMENSIONS



	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm
TIGHT A668 32-48	1100	530	/	590	80	/	120	/	870
TIGHT A668 60	1100	750	450	590	80	/	120	170	870
TIGHT A938 80-100-108	1300	760	542	590	95	30	125	300	870

TIGHT COMPRESSOR model A668 32

- Oil free compressor, positive displacement, twin-cylinder, vertical, oil free and single-stage.
- Main features:
 - Bore-stroke: 108x73 mm
 - RPM: 400
 - Vol. Displaced: 32 m³/h
 - Optimum compression value: 4
 - Maximum operating pressure: 20 bar
 - Bursting pressure: 80 bar
 - Maximum operating temperature: 130 °C
 - Pump induced lubrication
 - Oil sump
 - Ventilation cooling
 - Suction-output flange F 1-½" NPT
- Flame-proof electric motor, 4 poles induction, feed 380V 50 Hz, power 5,5 kW.
- Certificated ATEX and PED
- **Accessories included:**
 - Steel basement with antivibration supports and slides for belt regulation.
 - N°3 b-type belts, pulley, motor and protection sump
 - Mechanical liquid trap with net filter
 - Delivery, suction, oil pressure gauges
 - 4-way valve DN40 PN40
 - Safety valves (max. pressure 17,6 bar)
- **Accessories under request:**
 - Liquid trap with level
 - Pressure switch for the oil pressure
 - Pressure switch for the discharge pressure
 - Pressure switch for the suction pressure
 - Support column for pressure switches
 - Electric control board non EEXD or EEXD

TIGHT COMPRESSOR model A668 48

- Oil free compressor, positive displacement, twin-cylinder, vertical, oil free and single-stage.
- Main features:
 - Bore-stroke: 108x73 mm
 - RPM: 580
 - Vol. Displaced: 48 m³/h
 - Optimum compression value: 4
 - Maximum operating pressure: 20 bar
 - Bursting pressure: 80 bar
 - Maximum operating temperature: 130 °C
 - Pump induced lubrication
 - Oil sump
 - Ventilation cooling
 - Suction-output flange F 1-½" NPT
- Flame-proof electric motor, 4 poles induction, feed 380V 50 Hz, power 7,5 kW.
- Certificated ATEX and PED
- **Accessories included:**
 - Steel basement with antivibration supports and slides for belt regulation.
 - N°3 b-type belts, pulley, motor and protection sump
 - Mechanical liquid trap with net filter
 - Delivery, suction, oil pressure gauges
 - 4-way valve DN40 PN40
 - Safety valves (max. pressure 17,6 bar)
- **Accessories under request:**
 - Liquid trap with level
 - Pressure switch for the oil pressure
 - Pressure switch for the discharge pressure
 - Pressure switch for the suction pressure
 - Support column for pressure switches
 - Electric control board non EEXD or EEXD

TIGHT COMPRESSOR model A668 60

- Oil free compressor, positive displacement, twin-cylinder, vertical, oil free and single-stage.
- Main features:
 - Bore-stroke: 108x73 mm
 - RPM: 730
 - Vol. Displaced: 60 m³/h
 - Optimum compression value: 4
 - Maximum operating pressure: 20 bar
 - Bursting pressure: 80 bar
 - Maximum operating temperature: 130 °C
 - Pump induced lubrication
 - Oil sump
 - Ventilation cooling
 - Suction-output flange F 1-½" NPT
- Flame-proof electric motor, 4 poles induction, feed 380V 50 Hz, power 11 kW.
- Certificated ATEX and PED
- Accessories included:
 - Steel basement with antivibration supports and slides for belt regulation.
 - N°3 b-type belts, pulley, motor and protection sump
 - Mechanical liquid trap with net filter
 - Delivery, suction, oil pressure gauges
 - 4-way valve DN40 PN40
 - Safety valves (max. pressure 17,6 bar)
- **Accessories under request:**
 - Liquid trap with level
 - Pressure switch for the oil pressure
 - Pressure switch for the discharge pressure
 - Pressure switch for the suction pressure
 - Support column for pressure switches
 - Electric control board non EEXD or EEXD

TIGHT COMPRESSOR model A938 80

- Oil free compressor, positive displacement, twin-cylinder, vertical, oil free and single-stage.
- Main features:
 - Bore-stroke: 120x83 mm
 - RPM: 710
 - Vol. Displaced: 80 m³/h
 - Optimum compression value: 4
 - Maximum operating pressure: 20 bar
 - Bursting pressure: 80 bar
 - Maximum operating temperature: 130 °C
 - Pump induced lubrication
 - Oil sump
 - Ventilation cooling
 - Suction-output flange F 2" NPT
- Flame-proof electric motor, 4 poles induction, feed 380V 50 Hz, power 18,5 kW.
- Certificated ATEX and PED
- Accessories included:
 - Steel basement with antivibration supports and slides for belt regulation.
 - N°3 b-type belts, pulley, motor and protection sump
 - Mechanical liquid trap with net filter
 - Delivery, suction, oil pressure gauges
 - 4-way valve DN50 PN40
 - Safety valves (max. pressure 17,6 bar)
- **Accesories under request:**
 - Liquid trap with level
 - Pressure switch for the oil pressure
 - Pressure switch for the discharge pressure
 - Pressure switch for the suction pressure
 - Support column for pressure switches
 - Electric control board non EEXD or EEXD

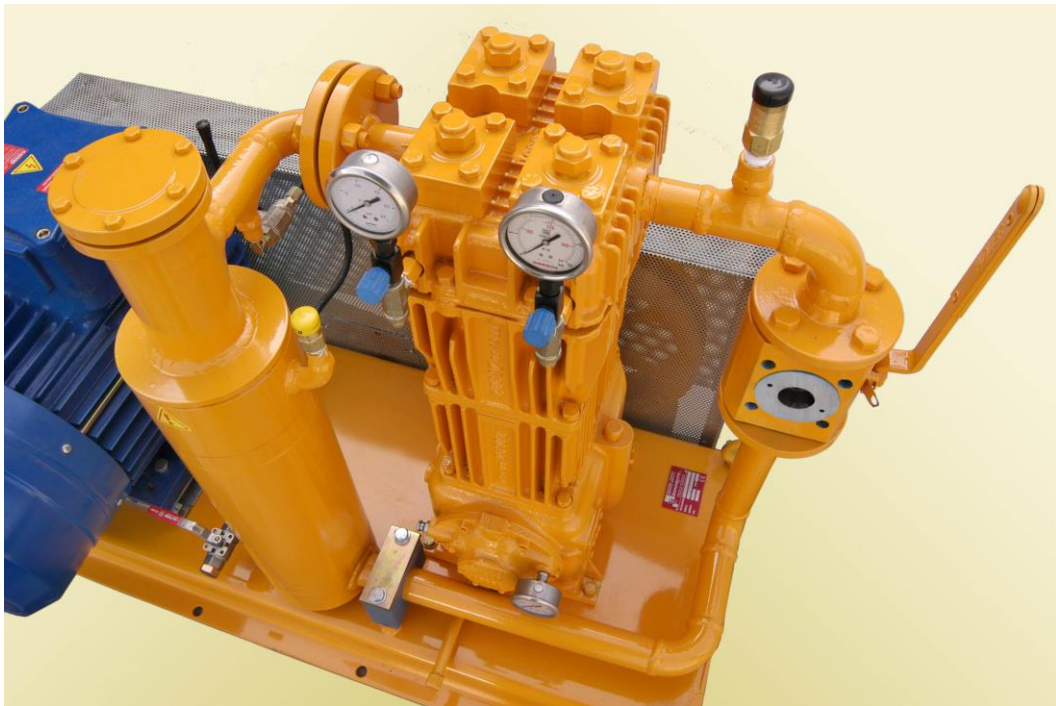
TIGHT COMPRESSOR model A938 100

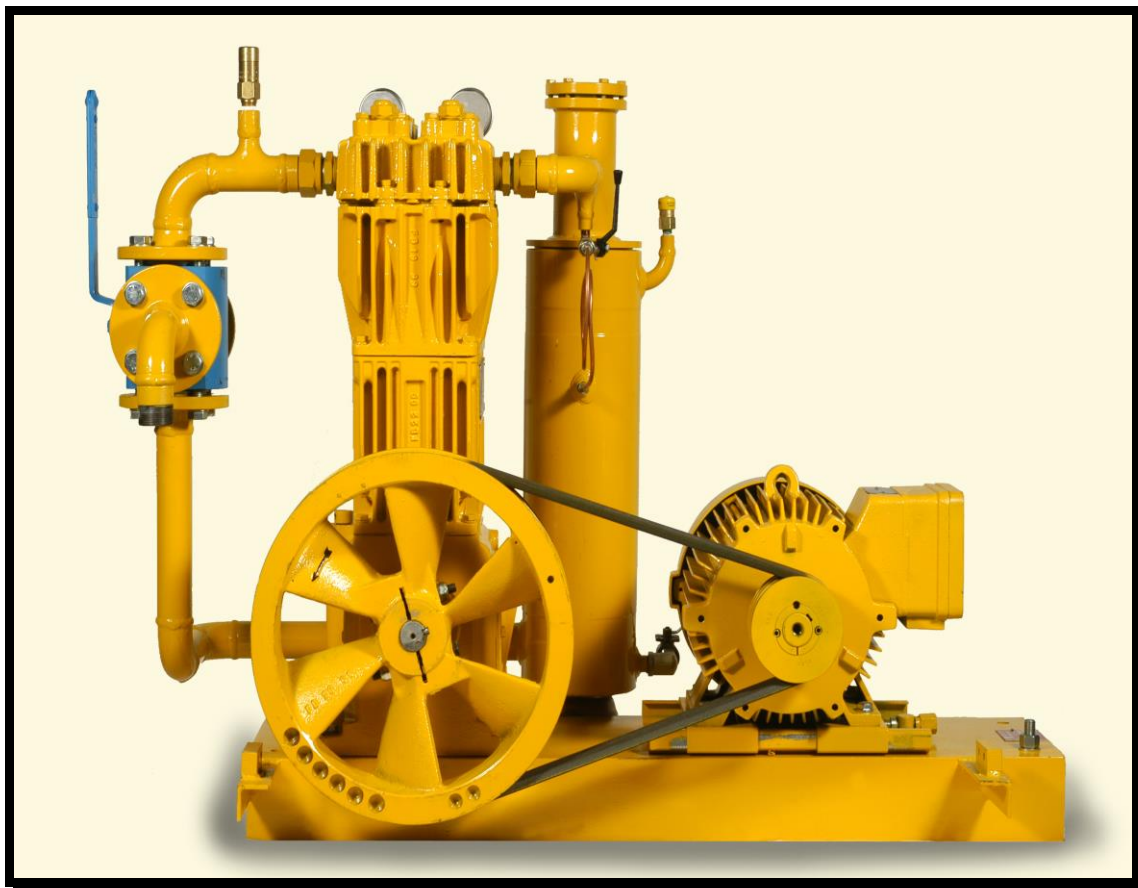
- Oil free compressor, positive displacement, twin-cylinder, vertical, oil free and single-stage.
- Main features:
 - Bore-stroke: 120x83 mm
 - RPM: 890
 - Vol. Displaced: 100 m³/h
 - Optimum compression value: 4
 - Maximum operating pressure: 20 bar
 - Bursting pressure: 80 bar
 - Maximum operating temperature: 130 °C
 - Pump induced lubrication
 - Oil sump
 - Ventilation cooling
 - Suction-output flange F 2" NPT
- Flame-proof electric motor, 4 poles induction, feed 380V 50 Hz, power 22 kW.
- Certificated ATEX and PED
- **Accessories included:**
 - Steel basement with antivibration supports and slides for belt regulation.
 - N°3 b-type belts, pulley, motor and protection sump
 - Mechanical liquid trap with net filter
 - Delivery, suction, oil pressure gauges
 - 4-way valve DN50 PN40
 - Safety valves (max. pressure 17,6 bar)
- **Accessories under request:**
 - Liquid trap with level
 - Pressure switch for the oil pressure
 - Pressure switch for the discharge pressure
 - Pressure switch for the suction pressure
 - Support column for pressure switches
 - Electric control board non EEXD or EEXD

TIGHT COMPRESSOR model A938 108

- Oil free compressor, positive displacement, twin-cylinder, vertical, oil free and single-stage.
- Main features:
 - Bore-stroke: 120x83 mm
 - RPM: 975
 - Vol. Displaced: 108 m³/h
 - Optimum compression value: 4
 - Maximum operating pressure: 20 bar
 - Bursting pressure: 80 bar
 - Maximum operating temperature: 130 °C
 - Pump induced lubrication
 - Oil sump
 - Ventilation cooling
 - Suction-output flange F 2" NPT
- Flame-proof electric motor, 4 poles induction, feed 380V 50 Hz, power 22 kW.
- Certificated ATEX and PED
- Accessories included:
 - Steel basement with antivibration supports and slides for belt regulation.
 - N°3 b-type belts, pulley, motor and protection sump
 - Mechanical liquid trap with net filter
 - Delivery, suction, oil pressure gauges
 - 4-way valve DN50 PN40
 - Safety valves (max. pressure 17,6 bar)
- **Accesories under request:**
 - Liquid trap with level
 - Pressure switch for the oil pressure
 - Pressure switch for the discharge pressure
 - Pressure switch for the suction pressure
 - Support column for pressure switches
 - Electric control board non EEXD or EEXD

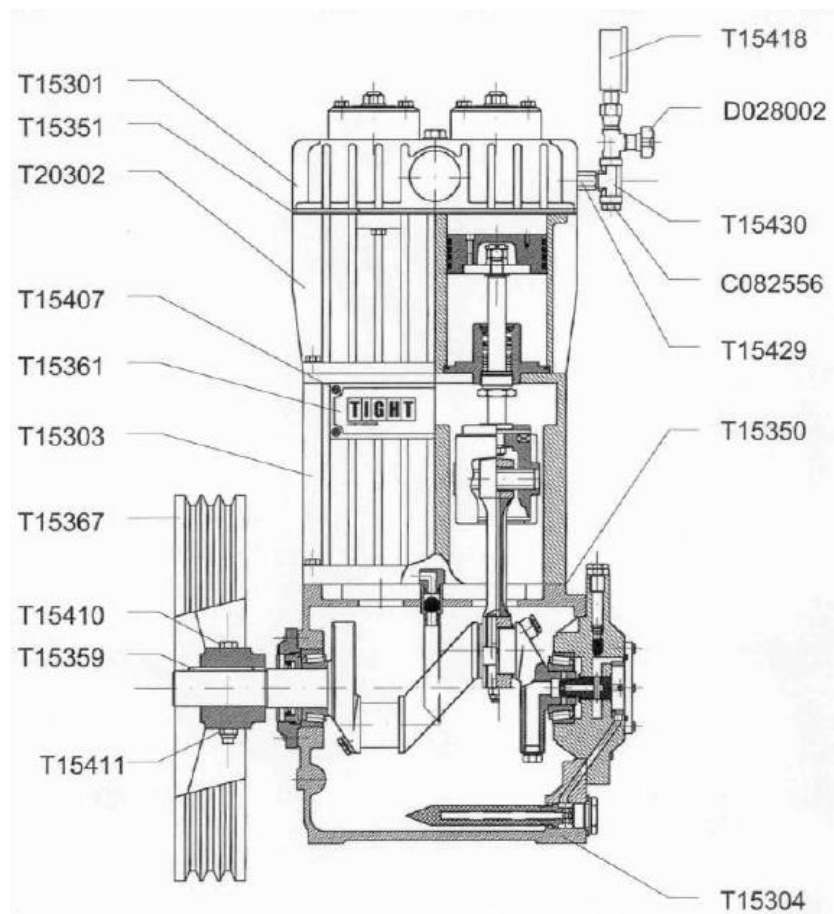






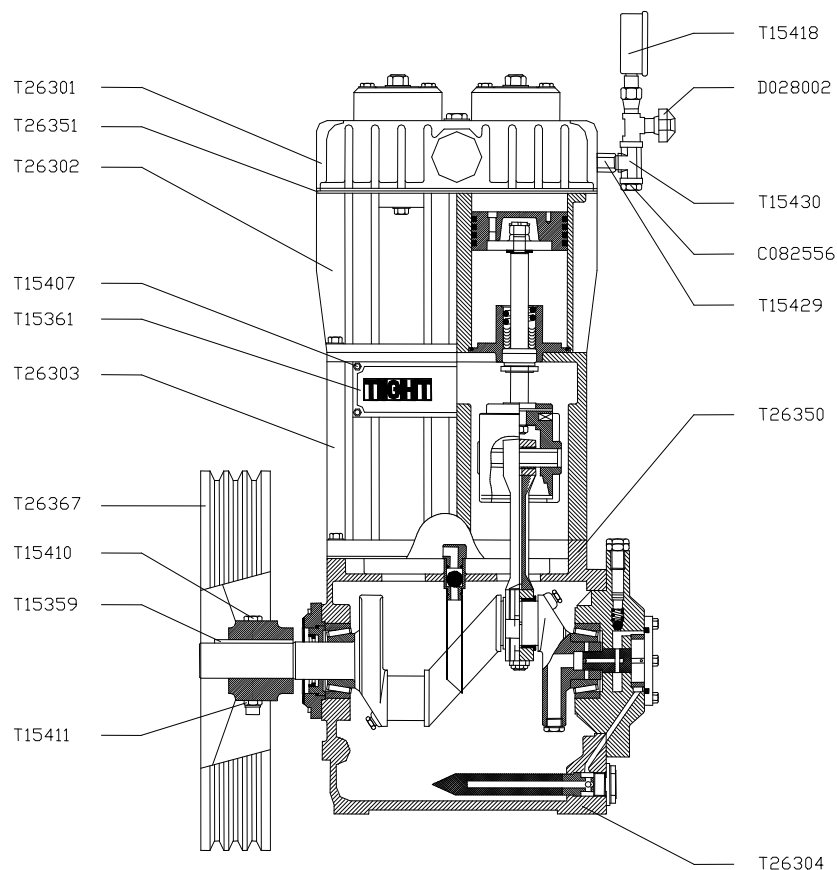


CUTWAY VIEW OF THE WHOLE COMPRESSOR A668



ITEM	REF.	DESCRIPTION	QTY.
1	T 15301	Cylinder head	1
2	T 15303	Intermediate casing	1
3	T 15304	Main casing	1
4	T 15350	Oil pan gasket	1
5	T 15351	Head gasket	1
6	T 15359	Pulley key	1
7	T 15361	Plate	1
8	T 15367	Self-ventilated pulley	1
9	T 15407	Coutersunk screw M4x10	8
10	T 15410	Pulley nut	2
11	T 15411	Pulley self-locking nut	2
12	T 15418	Vacuum pressure gauge	1
13	T 15429	Damper	2
14	T 15430	The cock-holder	2
15	T 20302	Cylinder block	1
16	D028002	1/4" needle cock	2
17	C082556	1/4" male cup	2

CUTWAY VIEW OF THE WHOLE COMPRESSOR A938



ITEM	REF.	DESCRIPTION	QTY.
1	T 15359	Pulley key	1
2	T 15361	Plate	1
3	T 15407	Coutersunk screw	8
4	T 15410	Pulley nut	2
5	T 15411	Pulley self-locking nut	2
6	T 15418	Vacuum pressure gauge	1
7	T 15429	Damper	2
8	T 15430	Tee cock-holder	2
9	T 26301	Cylinder head	1
10	T 26302	Cylinder block	1
11	T 26303	Intermediate casing	1
12	T 26304	Main casing	1
13	T 26350	Oil pan gasket	1
14	T 26351	Head gasket	1
15	T 26367	Self-ventilated pulley	1
16	D028002	1/4" needle cock	2
17	C082556	1/4" male cup	2