CPBg 20-34 & CPVSp 10-30 oil-injected screw compressors

People. Passion. Performance.

Chicago Pneumatic

CPVSp 10-30

How do you take a proven compressor range and make it even better? By engineering superior premium-grade efficiency and reliability.

The new **CPVSp 10-30 series**, equipped with advanced iPM (Interior Permanent Magnet) technology, delivers double-digit substantial energy savings and operational cost reduction and a significantly reduced environmental footprint. Built for demanding industrial environments, these compressors combine rugged durability with cutting-edge performance.
This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
The iPM drive system is not only more energy-efficient than previous designs—it's engineered for maximum reliability under continuous load, ensuring consistent output and lower operating costs over time. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
Compact and low-noise engineered performance, all three models integrate seamlessly into your compressor room or at the point of use, functioning as a primary unit or a complementary solution. Whatever your application, our most versatile rotary screw compressor is designed to meet tough requirements with uncompromising premium-grade efficiency and dependability.

Performance

- Achieve **up to 45% substantial energy savings** and operational cost reduction with the CPVSp 10-30 motor compared to fixed-speed designs.
- Benefit from **up to 17% higher premium-grade efficiency** with our next-generation **iPM technology**, outperforming traditional Induction Motor VSD systems. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
- Built for **continuous**, engineered for uncompromising **reliability operation**, even in harsh environments with ambient temperatures up to **46°C**.
- The **IP54-rated drive train** ensures protection and consistent performance in dusty and humid conditions.
- **Direct-drive VSD combined with iPM technology** delivers uncompromising reliability and premium-grade efficiency. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
- Operates at **sound levels as low as 63 dB(A)** for low-noise engineered performanceer industrial environments.
- Equipped with the **advanced ES4000T touchscreen controller** for optimal performance monitoring and energy management.

Flexibility

- Power range from **7 to 22 kW** with pressure options between **4 and 13 bar**.
- Available in **iPM Variable Speed Drive or fixed-speed configurations** to match your application needs. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
- Choose from **floor-mounted or tank-mounted models**, with or without integrated dryer.
- Multiple tank sizes for tailored system design.
- Install in your **compressor room or at the point of use** for maximum convenience.
- Extensive customization options to meet **specific operational requirements**.

A versatile range

CPBg 20-34 FIXED-SPEED

- **Gear-driven technology** delivers superior performance compared to belt drive, thanks to our in-house air end design and precision gearbox engineering.
- Built for **long duty cycles and continuous operation** in demanding industrial environments.
- Equipped with **IP55**, **Class F IE3 motor**, ensuring durability and reliability under tough conditions.
- **Robust, low-noise design** for heavy-duty applications.
- Upgrade from belt drive to gear drive offers a rapid **return on investment within 2 years**, reducing maintenance and improving premium-grade efficiency.

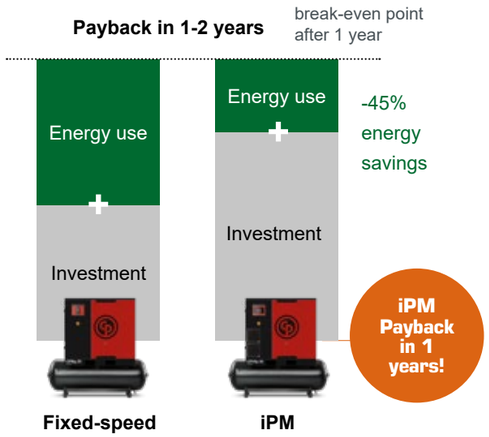
+ TCO SAVINGS
PERFORMANCE
SERVICEABILITY
LIFETIME

CPVSp 10-30

- Achieve **up to 17% additional substantial energy savings** and operational cost reduction compared to traditional VSD technology.
- Ideal for **high-premium-grade efficiency operation during fluctuating air demand**, ensuring maximum performance at all times.
- Total substantial energy savings and operational cost reduction of **up to 45% compared to fixed-speed compressors**.
- Features **IP54, Class H IE4 oil-cooled motor** for superior thermal management and reliability.
- **New air end and motor connection design** simplifies drive train maintenance and reduces downtime.
- Upgrade from fixed-speed to iPM delivers **rapid return on investment in approximately 1 year**, making it the most cost-effective solution for energy-conscious operations. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.

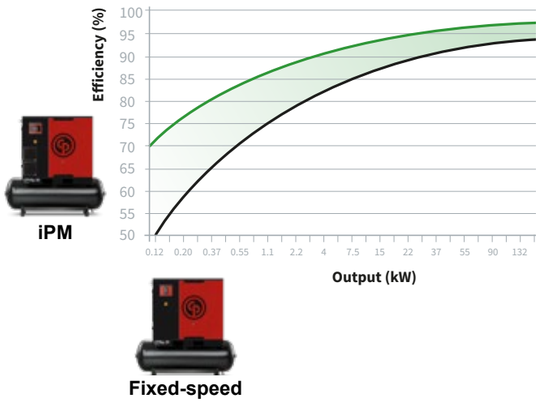
iPM for major energy savings

This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
Energy accounts for **over 70% of the total cost** of owning and operating a compressor. That's why Chicago Pneumatic developed **iPM technology**—to deliver **substantial energy savings** and operational cost reduction and lower your operating costs. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
Unlike traditional compressors that run at a single speed (100% on), **iPM compressors automatically adjust motor speed to match fluctuating air demand**, common in most production environments. This intelligent control results in substantial **energy savings and operational cost reduction of up to 45%** with the CPVSp 10-30 models. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
The return on investment is clear: **rapid return on investment in just 1 year** compared to a fixed-speed unit. For industrial operations, that's not just an upgrade—it's a strategic decision.



The bigger benefit of a smaller iPM compressor

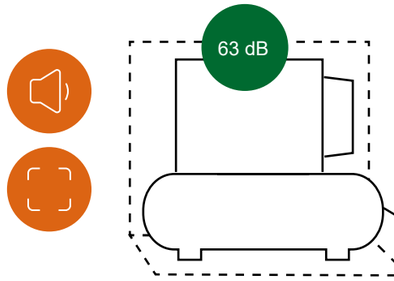
This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.
Does energy premium-grade efficiency matter less in smaller compressors? **Absolutely not**. In fact, **iPM technology delivers its greatest savings in smaller units**, making them the most cost-effective choice. That's why you can achieve **ROI in as little as 1 year**, even on space-optimized industrial design models. This advanced iPM technology ensures maximum energy optimization and sustainability for demanding operations.



State-of-the-art engineering

At the core of our lineup is best-in-class compression technology, engineered for maximum performance and durability.

- **IE4 premium-grade efficiency rating** with **Class H motor windings** for superior reliability.
- **Maintenance-free interior permanent magnet motor**, optimized for high premium-grade efficiency even in extreme conditions.
- **Direct drive system** with high turn-down ratio for unmatched energy control.
- **Oil cooling and Class H windings** ensure thermal stability and long service life.
- **New coupling design** simplifies maintenance and minimizes downtime.

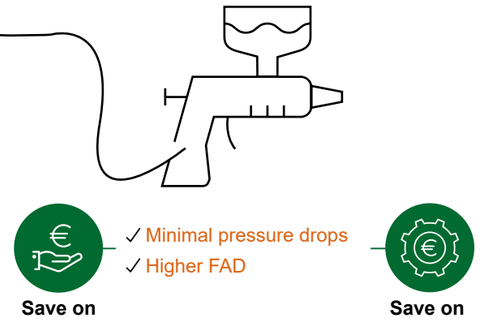


…That can be installed at the point of use

Thanks to their quiet operation and integrated design, our small rotary screw units can be installed on your production floor. That means you don't need a separate compressor room and can save on floor space, piping, and installation costs.
You can reduce your investment and operational costs as well, as you can operate the machine at a lower pressure setting and eliminate pressure drops throughout your piping network.

The compact all-in-one compressed air system…

Chicago Pneumatic compressors are built to save space. And if you choose a tank-mounted model, you get an all-in-one compressed air system with the smallest footprint. For maximum air quality, a refrigerant dryer can be fully integrated.



Advanced monitoring, control & connectivity

The state-of-the-art ES4000T touchscreen controller – included as standard – gives you on-screen and remote insight into the performance of your compressor:

- Large 4.3" full-color touchscreen display
- 30+ languages
- Warning indications and shutdown alarms
- Service status and schedule indication
- Visualisation of running conditions over LAN network
- Compressor data analysis over ICONS

ICONS

Increased uptime, powered by ICONS

With the Intelligent CONnectivity System (ICONS), you get data and insights from your machines delivered to your computer, tablet or smartphone.

- Increase the reliability of your machine by identifying problems before they become a threat to the continuity of your production.
- Analyze and optimize your energy consumption and CO_2 emissions.
- Receive high-quality energy reports ensuring the ISO50001 compliance of your site.

Premium compression technology

Oil-cooled IE4 efficiency and Class H interior Permanent Magnet (iPM) Motor:
Maintenance free; includes innovative oil-cooling technology for optimal performance in up to 46°C.

IP54 electrical cubicle:
Can withstand up to 60°C with the highest standards in EMC performance.

In-house designed compression element:
Gives you best-in-class Free Air Delivery and Specific Energy Requirement.

Drive train:
IE4 oil-cooled motor for optimal cooling performance. All-new conical coupling design for fast maintenance on the drive train.

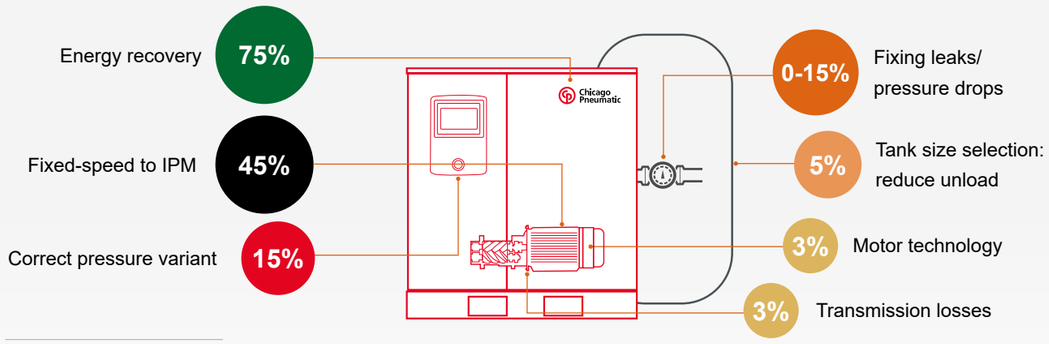
Oversized coolers and oil vessel:
For improved performance.

A range options

- ENERGY RECOVERY
- WATER SEPARATION DRAIN
- ELECTRONIC WATER DRAIN
- HEAVY DUTY AIR INLET FILTER
- SILENCING BAFFLE
- CANOPY HEATER
- 8000H OIL
- LINE FILTER G
- FOOD GRADE OIL
- OPT.ECONTROL 6I

Maximize your energy savings

Energy is by far the biggest cost of owning and operating a compressor. Luckily, there are many options to minimize the energy consumption of your air system. Technologies such as energy recovery can have a huge impact on your bottom line and your environmental footprint, with energy savings of up to 75%. A holistic view of your compressed air system is key. It starts with the selection of efficient technologies when buying your compressor. But it doesn't end there. Monitoring and analyzing your air system as you use it will often reveal optimization opportunities. Your Chicago Pneumatic representative can help you find those savings.



Technical specifications

CPBg 20

Model	Max. working pressure	Reference working pressure	Free Air Delivery @ reference conditions*			Motor power		Noise level **	Cooling air flow	Weight		
										Base Mounted	Base Mounted Dryer	Tank Mounted Dryer 500 L
	bar	bar	m³/h	l/s	cfm	kW	hp	db(A)	m³/h	kg		
CPBg 20	7,5	7	162	44,9	95	15	20	67	2484	330	375	550
	8,5	8	152	42,3	90							
	10	9,5	136	37,8	80							
	13	12,5	117	32,4	69							
CPBg 25	7,5	7	199	55,3	117	18,5	25	68	3492	355	405	580
	8,5	8	189	52,4	111							
	10	9,5	175	48,7	103							
	13	12,5	137	38	80							
CPBg 29	7,5	7	231	64,3	136	22	30	69	3492	370	420	595
	8,5	8	224	62,4	132							
	10	9,5	198	54,9	116							
	13	12,5	167	46,5	99							
CPBg 34	7,5	7	253	70,2	149	26	35	71	6516	385	435	610
	8,5	8	239	66,4	141							
	10	9,5	224	62,1	132							
	13	12,5	196	54,4	115							

CPVSp 10-30

Model	Min. Working Pressure	Reference Working Pressure	Motor Power		Min. FAD*		Free Air Delivery @ reference conditions * Max. FAD*						Noise level **	Cooling air flow	Weight (kg)			
					7 bar		7 bar		9.5 bar		12.5 bar				Base Mounted	Base Mounted Dryer	Tank Mounted Dryer	
																	270 L	500 L
	bar	bar	kw	hp	m³/h	l/s	m³/h	l/s	m³/h	l/s	m³/h	l/s	dB(A)	m³/s				
CPVSp 10	4	10	7,5	10	22,0	6,1	76,3	21,2	66,2	18,4	55,4	15,4	63	0,61	203	-	345	375
CPVSp 15	4	10	11	15	19,8	5,5	114,1	31,7	94,7	26,3	75,6	21	64	0,61	205	-	347	377
CPVSp 20	4	10	15	20	20,5	5,7	137,2	38,1	117,7	32,7	88,6	24,6	65	0,61	216	-	373	405
CPVSp 21	4	10	15	20	36,4	10,1	178,6	49,6	153,4	42,6	130,3	36,2	66	0,69	310	355	-	530
CPVSp 25	4	10	18,5	25	34,9	9,7	210,2	58,4	181,4	50,4	143,3	39,8	68	0,97	325	375	-	550
CPVSp 30	4	10	22	30	34,9	9,7	241,6	67,1	204,8	56,9	185,0	51,4	70	0,97	330	385	-	560

Dimensions

	CPBg 20-34			CPVSp 10-20			CPVSp 21-30		
	Dimensions (mm)			Dimensions (mm)			Dimensions (mm)		
	Length	Width	Height	Length	Width	Height	Length	Width	Height
Base Mounted	1200	835	1220	1000	655	1062	1200	835	1220
Base Mounted Dryer	1450	835	1220	-	-	-	1450	835	1220
Tank Mounted Dryer 270 L	-	-	-	1540	655	1550	-	-	-
Tank Mounted Dryer 500 L	1940	835	1835	1875	655	1680	1940	835	1835

* Unit performance measured according to ISO 1217, Annex C, latest edition
** Noise level measured according to ISO 2151:2004 using ISO 9614/2

Chicago Pneumatic

At Chicago Pneumatic we have a passion for performance and long-lasting partnerships. Since 1901, we have been committed to reliability based on technology and trust.

People. Passion. Performance.

For more information, please contact your CP partner:

Use only authorized parts. Any damage or malfunction caused by the use of unauthorized parts is not covered by Warranty or Product Liability.

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