

Auto-Connect / Machine Compatibility

Model	Linkage	Hydraulic Excavators *
CWAC-40	—	M315D / M316D
CWAC-40	—	M318D / M322D
CWAC-40	—	315D / 316E / 318E
CWAC-40	—	319D
CWAC-40	B	320D / 320E / 321D /323D/ 323E

* Please contact your Caterpillar dealer for couplers for non-current and/or special Cat machines.



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CONNECT with Caterpillar

Using excavators efficiently means using the right tool for the job. Yet changing a work tool manually is time consuming; it can take up to 30 minutes. And that's serious downtime. It's distracting for your operators too, who have to get out of the cab to fit the new tool and check the connection.

Caterpillar's Auto-Connect hydraulic coupler automates tool exchange fully, so operators can change work tools automatically from the safety and comfort of their cabs. They simply disconnect one tool and pick up the next. It's the fastest, most efficient way to switch tools while on the job. And the integral design is typically Caterpillar, preventing ruptured hoses and oil spills and cutting out manual intervention.

The new Cat Auto-Connect works on all major makes of excavator. Get more out of your operators and your vehicle assets, every working day.

**SAVE TIME
WITH EVERY
TOOL CHANGE!**
FAIL-SAFE TOOL CHANGES

Caterpillar has been making high-performance machines for 85 years, and our standard Quick Coupler CW platform has a European heritage stretching back over 35 years. In that time over 45,000 CW couplers have been sold, so it's a field proven platform.

The new Auto-Connect is based on that same platform, helping you get more out of your machines and your operators. So you can be more efficient and productive. All Day. Every Day.

GET THE CATERPILLAR CONNECTION.



FAST SWITCHING ...

... SAVES TYPICALLY
1.5 HOURS/DAY

HYDRAULIC
MATCHING
100%
RELIABLE

CONNECT with better performance

Auto-Connect is fast, failsafe and reliable, and eliminates the oil spillages common with manual connections. Its design allows for high flows at low back pressures to ensure tools are used most effectively and to maintain optimum performance and matching. The design also ensures a perfect connection by balancing the connecting forces evenly across hoses. And the working pressure of the fluid maintains that connection even more securely.

Auto-Connect automatically connects up to five hydraulic ports (two high pressure, two medium pressure and an optional drain) that typically need to be connected and disconnected by hand. That shortens the time for exchanging a hydraulic work tool from around half an hour to just a few seconds. Cutting out manual intervention also avoids potential spillage of hydraulic oil into the environment.

THE RIGHT TOOL FOR THE JOB!

With near instant tool exchange, your operators will be encouraged to use the right tool for the job. Every time. The tools last longer, improving your return on investment, with fewer machines needed to do the job and an improvement in your working practices.

CONNECT easily

Auto-Connect is a 'plug-and-perform' system based on Caterpillar's dedicated CW platform, and fits directly to your machine and existing controls. Its integral control unit means no machine modifications are needed either.



The Auto-Connect system is controlled via the Quick Coupler actuation circuit. Combined with Tool Control, it is really easy for operators to select tools and make fast changeovers. Now, switching from shears to grapples to buckets becomes child's play. And with features like auto depressurization integrated as standard, no additional hydraulic components are required.

Fast payback

With operators no longer required to unnecessarily leave the cab, and minimal conversion costs, the Auto-Connect system makes savings all down the line. With regular tool changes, the Auto-Connect will pay for itself within a couple of months.

The safe choice

Our aim in developing the Auto-Connect system was to significantly shorten the tool exchange cycle. Now, in addition to being more efficient, your operators will be safer and more comfortable too. In the cab, operators are protected from harsh work environments and no longer need to change hoses that have hot oil flowing through them.

0 hrs

**TIME SPENT
OUTSIDE THE CAB
CHANGING TOOLS**



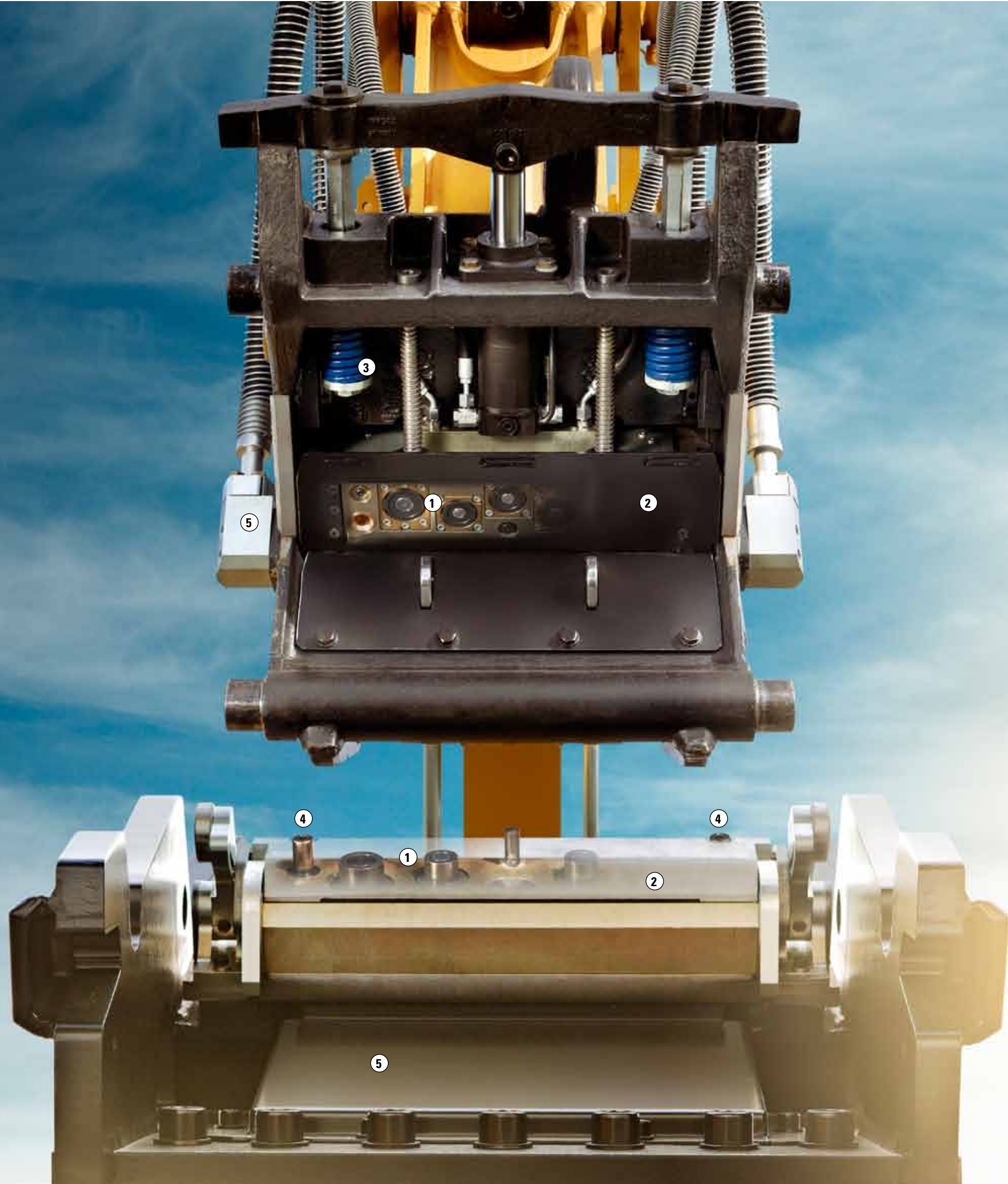
CONNECT reliably

Auto-Connect is an integrated solution containing a host of features that ensure absolute reliability in the field.

- ❶ **Two-step connection** – Simply hooking up the coupler immediately activates the wedge-lock, forming a tight mechanical connection. Only then is the hydraulic connection made automatically. When disconnecting, the situation is reversed – with the hydraulic fluid connectors being the first to disengage. This unique two-step procedure keeps the connecting forces low, preventing damage to sensitive hydraulic components, as well as eliminating fluid loss. Hydro-mechanical switches are used to ensure that the procedure is correctly sequenced.
- ❷ **Full Contamination Control on both Quick Coupler and Work Tool** – A sliding cover keeps any dust and debris away from the hydraulic area, protecting the fluid connectors when not in use. Seals on both the Quick Coupler and the work tool cover have been included to close the gap with the cartridges, ensuring full contamination control.
- ❸ **Fail-safe operation** – Even if hydraulic pressure is lost, the wedge will remain locked by the coil springs that retract it. If the circuit needs to be disconnected, the fluid connectors can be uncoupled manually in just a few seconds.
- ❹ **Precise alignment** – Robust guiding pins align the Quick Coupler and work tool before the fluid connectors are engaged. A unique secondary alignment system secures the coupling.
- ❺ **Internally routed hoses** – Hydraulic hoses are routed inside the work tool housing, greatly reducing the likelihood of a hose rupture during operation. The hose routing alongside the linkage idler also helps protect against hose rupture. Together, these design features reduce both machine downtime and oil spills into the environment.

2 STEP

PROCESS FOR
ABSOLUTE
RELIABILITY



CONNECT every work tool

WORK AS ONE

If you have already invested in a CW coupler and the work tools that go with it, you can also use them with the Auto-Connect. So no other interface is required (although you will need new mounting brackets for hydraulic work tools to get the full benefits of the Auto-Connect).

Cat Auto-Connect makes the perfect performance match between Quick Couplers and any kind of work tool. Caterpillar has a whole range of work tools that can be picked up by Auto-Connect, so you can always choose the right tool for the job!

Careful matching also ensures that Cat products are backwards and forwards compatible with the complete Cat range. Meaning you'll get a lifetime's use out of all your Cat equipment.

Hammer

Digging bucket

Demolition and
sorting grapple

Tiltable ditch
cleaning bucket

Compactor

Trenching
bucket

Pulverizer

Multi-Processor

SIMPLE AS 1 2 3

APPROACH



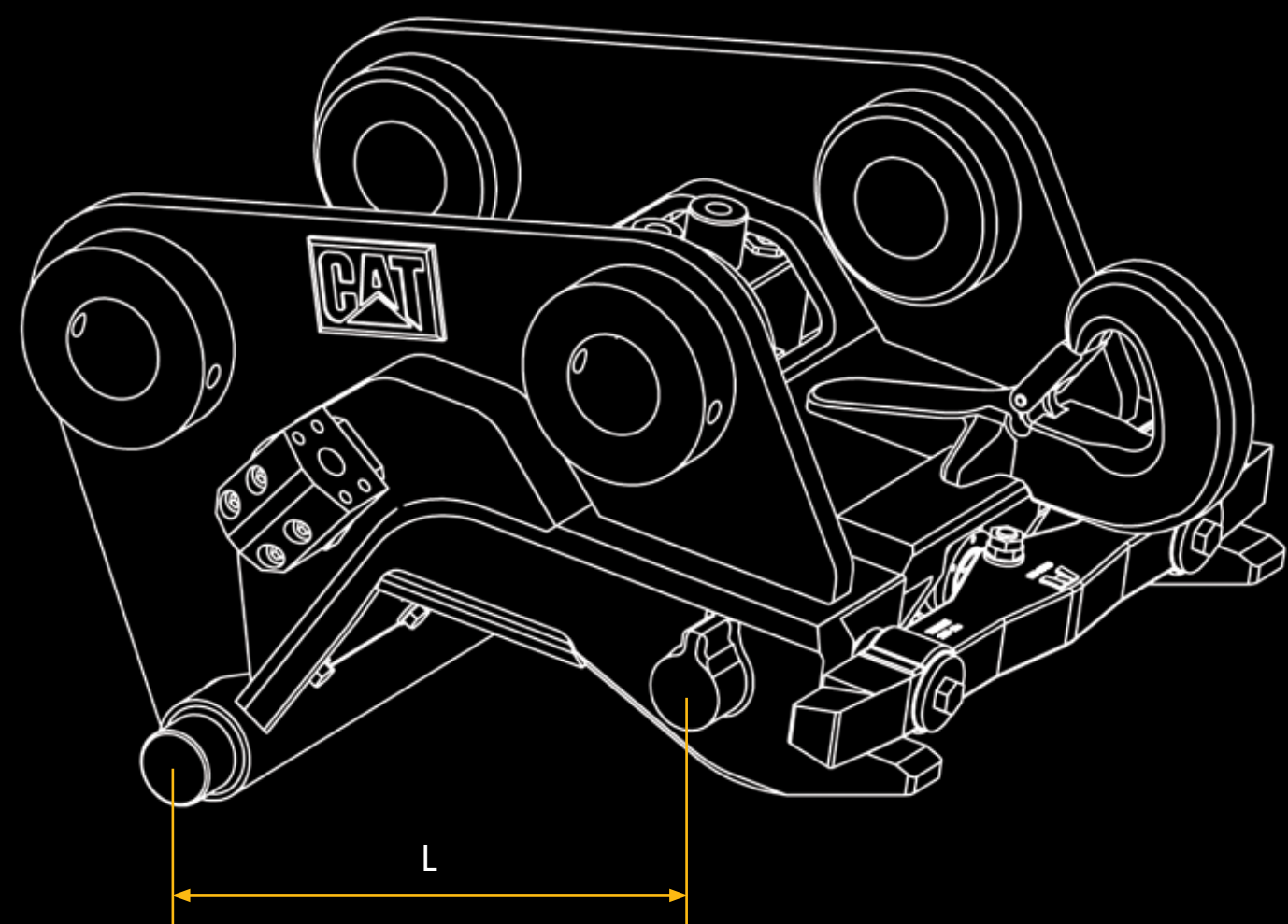
CONNECT



WORK



CONNECT with the right spec



Specifications

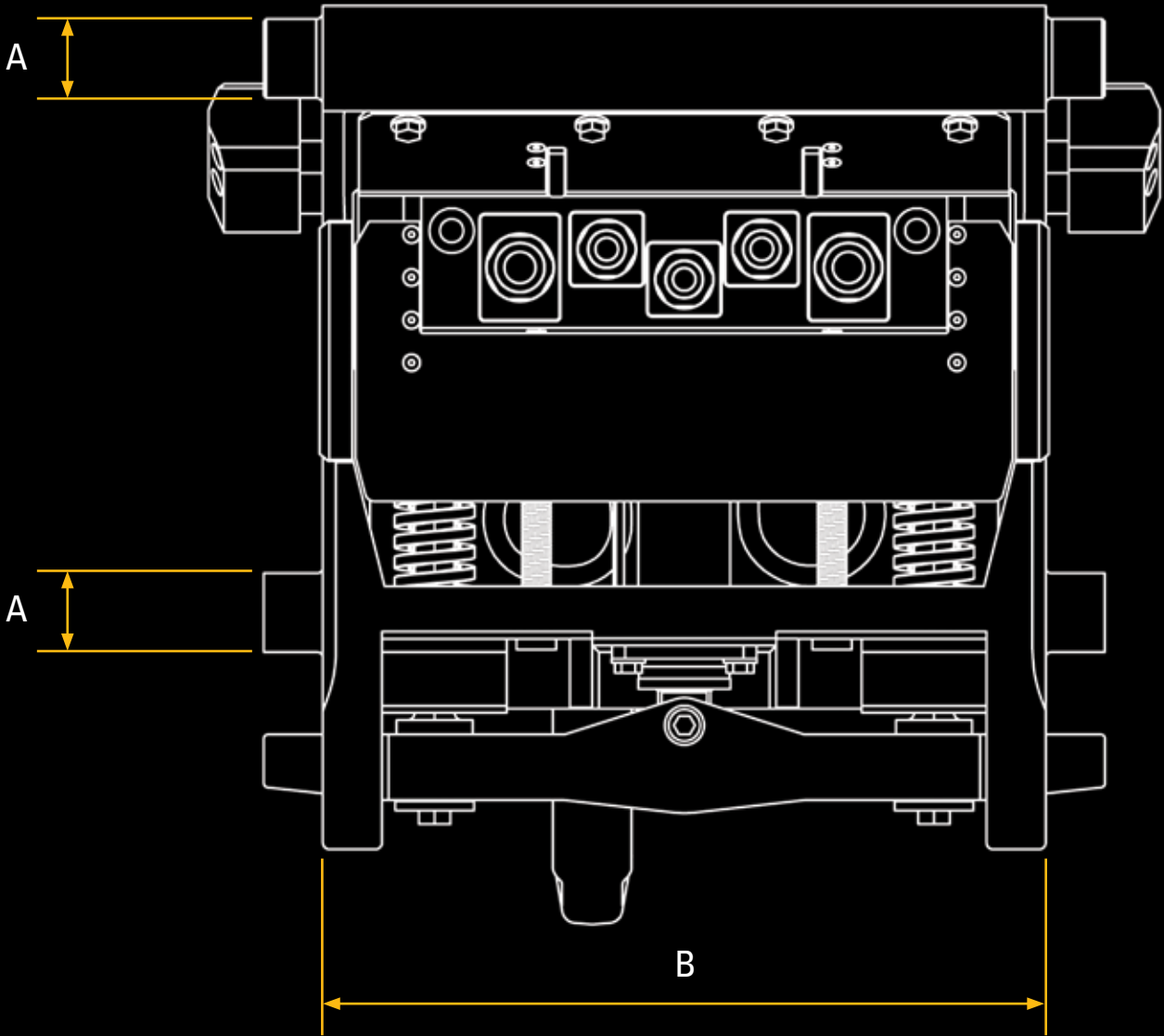
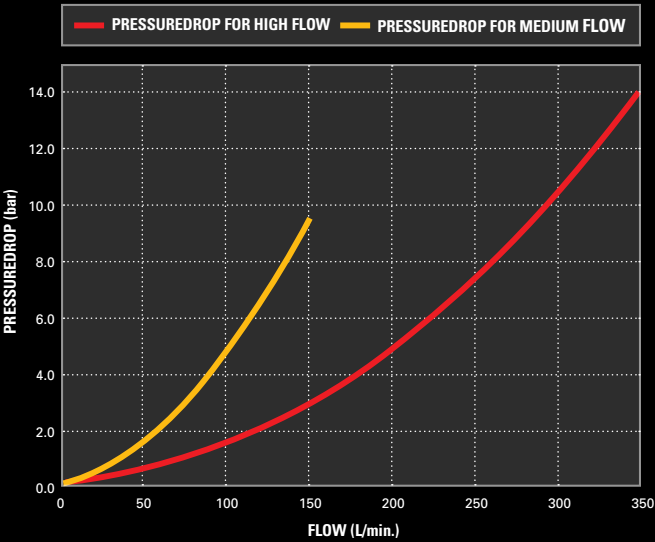
CWAC-40		
Weight (approx.)	kg	340
QC-pins (A)	mm	60
Width (B)	mm	550
Length (L)	mm	475
Hoisting-Hook	t	10
Total Fluidconnectings	-	5
Hose couplings High flow	-	2x 1"
Hose couplings Medium flow	-	2x 1/2"
Hose couplings Extra / Drain	-	1x 1/2"

CWAC-40 is interchangeable with CW-30 and CW-40.
Please note that the coupler and the tools have to match the correct carrier.

Auto-Connect High and Medium flow performance

The design of the Auto-Connect has been such that back pressure is kept at a minimum. Back pressure occurs when hydraulic fluid flows through the system, causing a build-up of pressure backward through the lines and valves.

By keeping the back pressure low, hydraulic work tools in use will perform at the highest level. This will benefit the worktool productivity and lower machine fuel consumption and is especially beneficial for hammers as their blow rate will be as high and efficient as possible.



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CAT DEALERS WORLD WIDE

CONNECT with your Cat dealer

The Caterpillar dealer network is a global resource available to all our customers. You may have your own maintenance and service facilities, or you may prefer to outsource all your equipment care so you can focus on your core business. Either way, your Cat dealer can provide whatever level of support you need – from online to on-site. Cat dealers can also offer innovative financial arrangements, like barter transactions and counter purchase agreements.

Manufactured to the highest standards

Caterpillar is the world's number one producer of construction and mining equipment, and the industry's largest manufacturer of work tools. Our record of manufacturing excellence is unsurpassed. Caterpillar produces using 6-Sigma principles to ensure our products meet your needs. All day. Every day.

If you're looking for peace of mind, connect with your Cat dealer today.

Cat dealers can also train your operators to work at peak efficiency or offer advice on productivity improvements.