

Paper Roll Clamps

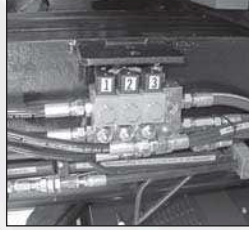


Paper Roll Handling

Paper Roll Damage Reduction Equipment

Bolzoni Auramo offers a wide variety of products and accessories for safer and non-damaging paper roll handling. We also offer products and services for quality control of the paper transport chain.

Paper Roll clamp pressure selection valves and pressure indication lights for easy clamping force control and monitoring.



Clamping force testing devices for testing and adjusting the paper roll clamp operation.



Paper Roll measuring devices for transport and handling quality control.



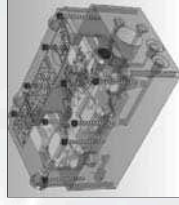
Protective devices for in-house paper roll damage prevention.



Paper Roll Clamps

Fully Mechanical Pressure Control Force-Matic

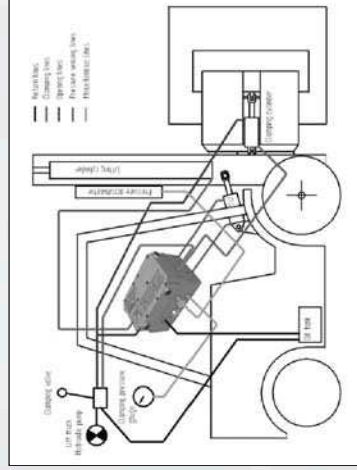
The Bolzoni Auramo Force-Matic is an innovative, fully mechanical, proportional pressure control system designed specifically for clamp equipped lift-trucks. Force-Matic is an effective system designed to prevent over clamping causing paper roll out of roundness.



One of the system's most interesting features is its ability to sense the weight of the load from two different sources and compute the best possible clamping pressure. The valve works basically a mechanical calculator which continuously adjusts the clamping pressure as a function of three measured hydraulic pressures (lifting and two sides of the tilting cylinder). Installation and adjustments are quite straightforward and can be done using normal tools.

Force-Matic main features:

- Effective pressure control device
- Prevent paper roll deformation by adjusting the clamping pressure according to the roll's weight
- Fully mechanical, no electrical connections required
- Wide adjustability range to be used to most truck-clamp combinations
- Heavy duty aluminium construction
- Built around standard hydraulic components
- Easy installation
- Virtually maintenance free.



Paper Roll Clamps

Technical Information



Oil flow rate recommendations

Model	Oil Flow Rate, Clamp		Oil Flow Rate, Rotator	
	Minimum l/min	Maximum Recommended l/min	Minimum l/min	Maximum Recommended l/min
AM-13RF/IRH ... AM-18RF/IRH	20	35	20	35
AR-22RH/RJ	30	35	20	30
AR-25RH/RJ	30	35	20	30
AR-30RH/RJ	40	45	20	30
AR-33RH/RJ	40	45	20	30
AR-37RH/RJ	40	45	20	40
AR-40RH/RJ	40	50	40	50
AR-45RH/RJ	40	50	40	60
AR-53RH/RJ	50	60	50	60
AR-60RH/RJ	50	60	50	70
RA-180-N(J)	30	35	30	35
RA-500-NL(J) ... RA-700-N(J)	70	80	70	80
RA-350-NJ-3 ... RA-450-NJ-3	60	60	50	60
RA-550-NJ-3 ... RA-600-NJ-3	70	80	70	80
RA-580-NJ-4 ... RA-600-NJ-4	60	60	50	60
RA-700-NJ-4 ... RA-800-NJ-4	70	80	70	80
RA-XXXNT	X	X	X	X
CTXR-XX	X	X	X	X
TA-XXX-XX, TRA-XXX-XX	X	X	X	X
A-XXX-XX, A-XXX-XX-3	X	X	X	X
LA-XXX-4, LA-XXX-6	X	X	-	-
BP-20RH/J	30	40	30	40
BP-25RH/J	30	40	30	40
BP-32RH/J	40	50	40	50
B-3X0-XX	50	55	-	-
B-400-XX	50	60	-	-
BA-50-XX, BC-50-XX	60	70	-	-

X Consult Bolzoni Auramo for specifications

Hydraulic functions and hydraulic pressure recommendations

Model	Clamping Pressure		Clamping Connection		Rotation Pressure		Rotation Connection		Hydraulic Functions
	Minimum MPa	Maximum MPa	Pressure, Max MPa	MPa	Minimum MPa	Maximum MPa	Pressure, Max MPa	MPa	
AM-13RF/IRH ... AM-18RF/IRH	X	16,0	16,0	16,0	10,0	12,0	25,0	25,0	2
AR-22RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-25RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-30RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-33RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-37RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-40RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-45RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-53RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
AR-60RH/RJ	X	16,0	21,0	21,0	10,0	16,0	21,0	21,0	2
RA-180-N(J)	X	12,0	16,0	16,0	10,0	16,0	16,0	16,0	2
RA-500-NL(J) ... RA-700-N(J)	X	16,0	16,0	16,0	10,0	16,0	16,0	16,0	2
RA-350-NJ-3 ... RA-450-NJ-3	X	16,0	16,0	16,0	10,0	16,0	16,0	16,0	2
RA-550-NJ-3 ... RA-600-NJ-3	X	16,0	16,0	16,0	10,0	16,0	16,0	16,0	2
RA-580-NJ-4 ... RA-600-NJ-4	X	12,0	16,0	16,0	10,0	16,0	16,0	16,0	2
RA-700-NJ-4 ... RA-800-NJ-4	X	16,0	16,0	16,0	10,0	16,0	16,0	16,0	2
RA-XXXNT	X	X	X	X	X	X	X	X	2
CTXR-XX	X	X	X	X	X	X	X	X	2
TA-XXX-XX, TRA-XXX-XX	X	X	X	X	X	X	X	X	2/3
A-XXX-XX, A-XXX-XX-3	X	-	X	X	-	-	-	-	1
LA-XXX-4, LA-XXX-6	X	-	X	X	-	-	-	-	1/2
B-3X0-XX	X	16,0	16,0	16,0	-	-	-	-	2
B-400-XX	X	16,0	16,0	16,0	-	-	-	-	2
BA-50-XX, BC-50-XX	X	16,0	16,0	16,0	-	-	-	-	2

X Consult Bolzoni Auramo for specifications

Standard mountings

The standard mounting for all Bolzoni Auramo attachments is an ISO 2328 class 2A/3A/4A mounting. See also specification pages. Standard mounting angle is 0°.

Mounting options

Non-standard or special mountings are not included in the attachment price. Please note that special mountings are not available for all clamp series. Consult Bolzoni Auramo. All mounting prices are add-on prices.
For non-standard mounting, detailed information is required from customer.

ISO 2328 Mounting , Class B*Model*

ISO 2328 2B

ISO 2328 3B

ISO 2328 4B

Quick-Change ISO 2328 Mountings

Lower mounting hooks can be opened by hand.

Model

ISO 2328 2

ISO 2328 3

ISO 2328 4

Dual-Hook ISO 2328 Mounting

Enables the clamp to be mounted on two different sized ISO 2328 carriages. Consult Bolzoni Auramo for product availability.

Also available with quick-change lower hooks.

Model

ISO 2328 2A/3A

ISO 2328 3A/4A

ISO 2328 2A/3A (QC)

ISO 2328 3A/4A (QC)

ISO 2328 Adapter Plates

Adapter plates for ISO 2328 B-type mounting. Adapter plates for changing the mounting class.

Model

On request

Pin-Type Mounting*Model**Lift truck capacity*

On request up to 7500 kg

On request over 7500 kg

Terminal West mounting*Model*

On request

Integral mounting*Model*

On request

Wheel loader mountings

Mounting adapters for Wheel loader use.

Model

On request

Spacer

A spacer is a fixed load extender that is attached between the clamp and the lift truck carriage. Several models with different extensions and capacities are available.

Model

On request

Separate sideshifting mounting*Model*

AM-13 ISO 2328/2A

AM-18 ISO 2328/2A

Installation kit

For two hydraulic functions (standard fittings)
An installation kit for two hydraulic functions contains 4 hoses with standard fittings. Length of the hoses is 600 mm. Other hose sizes and lengths are available on request.

Number

12 L

15 L

Oil flow range

CSPV05 20 – 150 l/min

Chain slack prevention valve

The chain slack prevention valve reduces paper roll damage by stopping the downwards lift mast movement immediately when the load is lowered down. Extra slack in the mast chains will not cause the paper roll clamp to drop downwards when the clamp arms are opened.

Number

CSPV05

Four-stage pressure-relief valve (manually controlled)

Manually controlled four-stage pressure relief valve. Specially recommended to be used in combination with paper roll clamps. Adjustable pressure settings. Consult Bolzoni Auramo for technical specifications.

Number

On request 25 – 80 l/min

Solenoid valve (2 functions)

12 / 24 VDC (without cable reel, cable and operator control knob).

Number

On request

Control knob

Number

On request

Four-stage pressure-relief valve (electricaly controlled)

Electrically controlled four-stage pressure relief valve. Easy clamping pressure selection from the lift truck cabin. Specially recommended to be used in combination with paper roll clamps. Adjustable pressure setting.

Number

426778.12 20 – 120 l/min 12 Volt DC

426778.24 20 – 120 l/min 24 Volt DC

426779.12 20 – 240 l/min 12 Volt DC

426779.24 20 – 240 l/min 24 Volt DC

Pressure Gauge

Number

On request

Pressure-control lights

To be used in combination with electrically controlled four-stage pressure relief valve. Lights in the light tower indicate the selected pressure setting..

Number

Operation voltage

420565.12 12 Volt DC

420565.24 24 Volt DC

Pressure-relief valve

Limits the rotation pressure of 180-degree rotating paper roll clamps. Suitable for following clamp models: RA-N / RA-NU / CTXR / TRA-N / TRA-NJ.

Number

On request

Contact pads are the most important part of the clamp attachment. In most normal handling situations, the pads are the only parts of the clamp which actually are in contact with the paper roll. Therefore, Bolzoni Auramo has paid special attention in designing and manufacturing contact pads which will ensure a safe and non-damaging roll handling.

All Bolzoni Auramo contact pads have the following properties in common:

- Thin pad design. The minimized pad thickness ensures good knifing properties when handling tightly stacked rolls.
- Smooth pad profile and safe finish. The pads have no protruding parts or edges to damage the adjacent paper rolls.

Cast Pads

The cast contact pads are the standard pads of several Bolzoni Auramo roll clamp models. Cast pads are good all-round pads that are at their best with softer paper grades.



Steel-Sprayed Pads

The steel-sprayed contact pads are available as optional pads for all Bolzoni Auramo roll clamp attachments. They are also used as standard pads on some roll clamp models. See also the model specifications. Steel-sprayed pads are good all-round pads for all paper grades.



Rubber-Faced Pads

The rubber-faced contact pads are available as optional pads for all Bolzoni Auramo roll clamp attachments. They are also used as standard pads on some roll clamp models. See also the model specifications. The upper, lower and front edges of the rubber are sunken to the pad base plate and thus the edges of the rubber are well protected against mechanical wear. Rubber-faced pads are good all-round pads for all paper grades.



Polyurethane-Faced Pads

The polyurethane-faced contact pads are available as optional pads for many Bolzoni Auramo roll clamp attachments. The friction surface of these pads is formed by molding liquid polyurethane solution onto the pad plate. The result is a non-marking friction surface with relatively good friction properties.



Flexible Contact Pads

A flexible contact pad can adjust into varying roll diameters. A rubber-faced stainless steel band is pressed towards the paper roll. The pad design allows the band to adjust to the roll diameter.

Tissue Paper Roll Pads

The standard contact pad for tissue roll clamps is an oversized rubber-faced pad. The tissue pads can also be delivered without any friction surface. If the paper roll is very soft, the upper and lower edges of the tissue pads can optionally be strongly chamfered in order to prevent the pad edges from cutting into the paper roll. Special pad sizes are available on request.

Special Contact Pads

Bolzoni Auramo manufactures a great variety of different contact pads. Special pad models and friction surfaces are available on request.

Contact Pads - Prices

All contact pad prices are add-on prices and are valid only with the original factory delivery of the clamp attachment. A detailed technical description is required from the customer for special or modified contact pads.

Optional contact pad friction surfaces:

For standard rotating and non-rotating paper roll clamps. Please note that the prices are not valid for multi-roll paper roll clamps (Series LA-4, LA-6 clamps). Consult Bolzoni Auramo for further info and pricing regarding these models.

Model

Steel-Sprayed

Rubber-Faced

- Smooth surface, black rubber

- Wafler surface, black rubber

- Wafler surface, white rubber

Polyurethane-Faced

Rubber-faced, Flexible Pads

Special Pad Surfaces