## SUBMITTAL SHEET

JOB NAME:	ITEM TAG:
JOB LOCATION:	PART NUMBER:
CONTRACTOR:	DATE:
ENGINEER APPROVAL:	DATE:

# **MECHPRESS Carbon Steel Press Systems**

#### **MECHPRESS Carbon Steel Press Systems**

- MECHPRESS Carbon Steel Press Fittings by CB Supplies are designed to be used with Schedule 10 to 40 carbon steel pipe (in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems) on nominal sizes 1/2" to 2". MECHPRESS fittings can be connected to most carbon steel systems installed in residential, commercial, and industrial systems, including systems with seamless steel pipe (S) or ERW steel pipe (W).
- All MECHPRESS fittings are zinc-nickel coated to protect against corrosion and available with the choice of two sealing elements Ethylene Propylene Diene Monomer (EPDM) for Mechanical and Fire Protection applications, or Hydrogenated Nitrile Butadiene Rubber (HNBR) for Gas and Fuel Oils applications.
- MECHPRESS and MECHPRESS-G carbon steel press fittings are easily distinguished by unique colour recognition on all fittings, ensuring the proper sealing element is installed every time with shrink wrapped hubs: yellow for HNBR; green for EPDM.
- 360° Symmetric design with double row of SS grip rings -Superior pull-out resistance
- Smart Leak-Proof Technology Fittings will leak if not pressed
- Over 250 + fittings available
- Compatible with leading carbon pipe press tools and jaws in the market
- 15-year limited warranty on all MECHPRESS carbon steel press fittings

MARKINGS, SPECIFICATONS & CERTIFICATION:

- Fall away shrink-wrapped fitting hubs, provide visual confirmation • that fittings have been pressed before going into service.
- Visual Check Two colour coded dots per fitting located on each side for easy identification after installation:
- MECHPRESS Green for Mechanical & Fire Protection - MECHPRESS-G - Yellow for Gas & Fuel Oils
- Sealing Elements specific for use EPDM (Black) for MECHPRESS and HNBR (Yellow) for MECHPRESS-G
- CSA Class C330511, GAS ACCESSORY DEVICES Press Connect Type Metallic Fittings
- CSA Class C330591, GAS ACCESSORY DEVICES Press connect Type Metallic Fittings Certified to US Standards







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#### LISTINGS, CODES & STANDARDS

	MARK	MECHPRESS	MECHPRESS-G
Referenced : Listing, Code or Standard		Mechanical & Fire Protection	Gas & Fuel Oils
Canadian Registration No. (CRN)		✓	$\checkmark$
ANSI/CAN/UL 213, Standard for Rubber Gasketed Fittings for Fire-Protection Service	CERTIFICATION CONTRACTOR	√	
ASME B31.1, Power Piping			$\checkmark$
ASME B31.3, Process Piping		✓	$\checkmark$
ASME B31.5, Refrigeration Piping & Heat Transfer Components		✓	$\checkmark$
ASME B31.9, Building Services Piping		✓	$\checkmark$
CSA B149.1, Natural gas and propane installation code			$\checkmark$
CSA Class C330511, GAS ACCESSORY DEVICES - Press Connect Type Metallic Fittings			$\checkmark$
CSA Class C330591, GAS ACCESSORY DEVICES - Press connect Type Metallic Fittings Certified to US Standards			V
CSA/ANSI LC 4/CSA 6.32, Press-connect metallic fittings for use in fuel gas distribution systems			$\checkmark$
FM 1920, Pipe Couplings and Fittings for Aboveground Fire Protection Systems	FM	✓	
IAPMO/ANSI/CAN Z1117, Press Connections	JPC JMC &	~	
International Fuel Gas Code (IFGC)		✓	√
International Plumbing Code (IPC)		✓	$\checkmark$
National Plumbing Code of Canada		✓	$\checkmark$
NSF/ANSI 61, Drinking Water System Components – Health Effects	C C	√	
NSF/ANSI/CAN 372, Drinking Water System Components – Lead Content	C C B	✓	
UL 852, Standard for Safety Metallic Sprinkler Pipe for Fire Protection Service	deminits Bernulation Eccention	✓	
ULC/ORD-C199S, Light Wall Steel Pipes for Sprinkler Systems	CERTIFIC STATES	√	
Uniform Plumbing Code (UPC)	C C C C	$\checkmark$	$\checkmark$



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#### **Minimum Distance Between Press Fittings**

Nominal Pipe Diameter (in.)	Minimum Distance (in.)
1/2	
3/4	1/4
1	
1-1/4	
1-1/2	1/2
2	

#### Insertion Depth for Couplings Without Stops

# **Pipe Hanger Spacing**

Pipe Size (in.)	Maximum Span (ft)	Minimum Rod Diameter (in.)
1/2		
3/4	7	2/0
1		3/8
1-1/4		
1-1/2	9	3/8
2	10	3/8

#### **Insertion Depth** for Extended Couplings Without Stops

Adjustable Insertion Depth			
Pipe Diameter (in.)	Min. Insertion Depth (in.)	Max. Insertion Depth (in.)	
1/2	1-1/16	1-5/8	
3/4	1-3/16	1-13/16	
1	1-3/8	1-15/16	
1/1/4	1-13/16	2-1/2	
1-1/2	1-7/8	2-3/4	
2	2	2-3/4	

#### Extended Adjustable Insertion Depth Pipe Diameter Min. Insertion Max. Insertion Depth (in.) Depth (in.) 1/2 1-1/16 2-3/4 3/4 1-3/16 2-13/16 1 1-3/8 3 1-1/4 1-13/16 3-1/2 1-7/8 1-1/2 3-9/16 2 2 3-11/16

#### **RECOMMENDED TOOLS**

- **MILWAUKEE M18 FORCE LOGIC**
- **RIDGID RP 240**
- **RIDGID RP 241**

### NOTES REGARDING PRESS TOOLS

- See Operator's Manual for proper tool instructions. •
- Ensure press jaws and rings are compatible with carbon steel. Do not use press tools or components intended for copper press-fit systems.
- Do not mix and match components from different manufacturers. •



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#### **GENERAL INSTALLATION NOTES**

- Press tool operator's manual and fitting manufacturer's installation instructions must be read • in full before installation.
  - Failure to follow all instructions may have consequences, including but not limited to; premature failure of system, property damage, personal injury, and/or death.
- The installation, inspection, testing and purging of systems shall be in accordance with relevant codes . and standards for all installations, as directed by the authority having jurisdiction.

MECHPRESS	MECHPRESS-G
Mechanical and Fire Protection Systems	Gas and Fuel Oil Systems
<ul> <li>Fittings are for use with approved mechanical applications and are intended for the operating pressure 0-200 psi.</li> <li>See approved applications table for suitable types of service.</li> <li>Fittings are not approved for fuel gas applications.</li> <li>The mechanical system shall comply with the Electrical Bonding and Grounding Section of the relevant Plumbing &amp; Electrical code. The metal-to-metal contact between fittings and pipe ensures continuity of the bonding through this contact.</li> </ul>	<ul> <li>Fittings are for use with fuel gases and are intended for an operating pressure of 0-125 psi.</li> <li>See approved applications table for suitable types of service.</li> <li>The installation, inspection, testing and purging of systems shall be in accordance with local codes, or in the absence of local codes, with NFPA 54/ANSI Z223.1, <i>National Fuel Gas Code</i> as directed by the authority having jurisdiction.</li> <li>Fuel gas system shall not be used as a grounding electrode for electrical systems.</li> </ul>



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#### APPROVED APPLICATIONS FOR MECHPRESS AND MECHPRESS-G CARBON STEEL PRESS

	System Operating Conditions		Sealing	g Element	
Type of Service		Pressure	Temperature	EPDM	HNBR
	Comments	(psi)	(°C)	MECHPRESS	MECHPRESS-G
	FLU	JIDS/WATER			
Chilled Water	Ethylene glycol/propylene glycol	200	200 See Note 1	√	
Hydronic Water	Ethylene glycol/propylene glycol	200		√	
Fire Sprinkler	NFPA 13,13D,13R	175	See Note 1	√	
Low Pressure Steam	Low Pressure Steam Supply Lines	5	Max 108°C	<b>√</b> <sup>2</sup>	
	FUEL OIL	AND LUBRIC	ANTS		
Natural gas	Major component methane				$\checkmark^4$
Propane			- <b>40</b> °C to 82°C		√4
Butane		125			√4
Heating fuel oil			Mars 20%		√
Diesel			<b>Max 38</b> °C		✓
Mineral oil		200	Ambient 3		√
Lubricating oil	Petroleum base	200	Max 65°C		✓
	GAS	ES/VACUUM	I		
Compressed air	Oil concentration≤25 mg/m <sup>3</sup>			$\checkmark^2$	$\checkmark^2$
Compressed air	Oil concentration > 25 mg/m <sup>3</sup>				<b>√</b> <sup>2</sup>
Nitrogen		200	<b>Max 60</b> °C	√	√
Carbon dioxide	Dry			√	√
Argon gas				√	$\checkmark$
Oxygen	Non-medical Keep oil and grease free	140	Max 60°C	1	
Hydrogen		125		√	√
Acetylene	Test pressure 350PSI	20	Ambient 3	√	✓
Vacuum	Minimum absolute pressure Maximum differential pressure	750μm Hg 29.2"Hg	Max 71°C	√	✓

1. System pressure and range depend on seals. Any ranges listed in the table above are limited by the following seals to include: 1a EPDM temperature range is typically -17°C to 120°C.

1b HNBR temperature range is typically -40°C to 82°C.

2. The system must contain sufficient condensate drain.

3. The ambient temperature should be regarded as a normal working condition and should not exceed the limit of the sealing ring.

4. Complies with CSA 6.32/ANSI LC-4.



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