



CS A105N 3000 PSI ELBOW MALE X FEMALE

90 Degree Street Elbow · Forged Carbon Steel · Class 3000

SKU: SW-0183

BRAND: BOTHWELL

CLASS 3000

MALE X FEMALE



FIG. 1 | CS A105N CLASS 3000 ELBOW, MALE BY FEMALE NPT

PRODUCT OVERVIEW

The SWBM CS A105N Class 3000 Male by Female Elbow turns a line through 90 degrees with one male end and one female end. It screws straight into a female outlet on a valve, gauge or header without the nipple that a double female elbow would need.

Removing that joint shortens the assembly and cuts a leak path, which matters on instrument and drain connections. The body is made to ASME B16.11 with NPT threads to ASME B1.20.1.

Fitting type	90 degree street elbow
Function	Right angle change of direction
Material	ASTM A105N forged steel
End connection	One male NPT, one female NPT
Standard	ASME B16.11
Size range	1/8" to 4" (DN6 to DN100)

TECHNICAL SPECIFICATION

Material	ASTM A105N carbon steel	Finish	Black, oiled for transport
Manufacture	Forged and normalised	Marking	Grade, class, size and heat number
Dimensional standard	ASME B16.11	Temperature range	-29°C to +425°C
Pressure class	Class 3000	Country of origin	Taiwan
Ends	One male NPT, one female NPT	Certification	EN 10204 3.1 on request
Threads	ASME B1.20.1 NPT		



PRODUCT DATA SHEET

CS A105N 3000 PSI ELBOW MALE X FEMALE

Ref. SW-0183 | Rev. 01

BILL OF MATERIALS

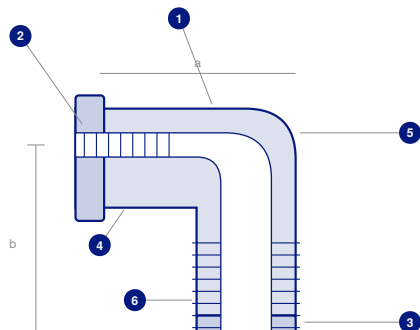


FIG. 2 | SECTIONAL ARRANGEMENT

#	FEATURE	DESCRIPTION
1	Body	ASTM A105N, forged one piece
2	Female socket	NPT thread to ASME B1.20.1
3	Male thread	NPT thread to ASME B1.20.1
4	Waterway	Machined bore through the body
5	Thread run-out	Machined relief at the root of the male thread
6	Marking	Grade, class, size and heat number

One piece forged fitting with no seals or moving parts. The same figure is stocked in the threaded and socket weld patterns and in higher classes as separate items.

DIMENSIONS AND WEIGHTS

SIZE	DN	THREAD / SOCKET	PIPE OD (MM)
1/8"	6	1/8" NPT	10.3
1/4"	8	1/4" NPT	13.7
3/8"	10	3/8" NPT	17.1
1/2"	15	1/2" NPT	21.3
3/4"	20	3/4" NPT	26.7
1"	25	1" NPT	33.4
1.1/4"	32	1.1/4" NPT	42.2
1.1/2"	40	1.1/2" NPT	48.3
2"	50	2" NPT	60.3
2.1/2"	65	2.1/2" NPT	73.0
3"	80	3" NPT	88.9
4"	100	4" NPT	114.3

Pipe outside diameters are to ASME B36.10M and are the sizes the socket or thread is made to suit. Body dimensions, socket depth and minimum wall are to ASME B16.11 and are issued on certified drawings against order. Masses are not published for this item.

ORDERING INFORMATION

FIELD	OPTIONS
Product code	SW-0183
Size	1/8", 1/4", 3/8", 1/2", 3/4", 1", 1.1/4", 1.1/2", 2", 2.1/2", 3", 4"
Thread	NPT to ASME B1.20.1
Material	ASTM A105N forged carbon steel
Order example	SW-0183 / 1/2" / NPT / CLASS 3000

Stock held in Dubai for fast despatch across the UAE and GCC. Contact our sales desk for pricing, availability, project quantities and certification requirements.



PRODUCT DATA SHEET

CS A105N 3000 PSI ELBOW MALE X FEMALE

Ref. SW-0183 | Rev. 01

PRESSURE AND TEMPERATURE

Pressure class	To ASME B16.11
Basis of the class	A class designation, not a psi rating
Temperature range	-29°C to +425°C for A105N
Rating	Take the allowable from the design code

ASME B16.11 class designations are not cold working pressures in psi. The allowable pressure at temperature must be taken from the applicable design code for A105N. Confirm the duty with SWBM before use above 425°C or below -29°C, and for sour service.

TYPICAL APPLICATIONS

- Oil and gas gathering and process piping
- Refinery and petrochemical plant
- Steam, condensate and boiler house piping
- Instrument tappings and small bore branch connections
- Hydraulic and high pressure utility lines
- Power generation and industrial process plant

COMPLIANCE AND QUALITY

- Manufactured to ASME B16.11
- Material ASTM A105N, normalised carbon steel forging
- NPT threads to ASME B1.20.1
- Marked with grade, class, size and heat number
- Material test certificate EN 10204 3.1 on request
- Suitable for ASME B31.1 and B31.3 piping systems
- NACE MR0175 compliant material against enquiry

INSTALLATION AND OPERATION

- Check the thread form and class against the mating component before assembly
- Apply an approved thread sealant or PTFE tape to the male thread only
- Make up to the correct engagement, do not rely on sealant to bridge a slack fit
- Support small bore branch connections against vibration and cantilever load
- Do not exceed the allowable stress for A105N at the design temperature
- Hydrotest the joint in line with the applicable design code

COMPANY

Sunel Wala Building Materials
Trading Co. LLC (SWBM)
Dubai, United Arab Emirates

SALES ENQUIRIES

info@swbm-fittings.com
Tel: +971 4 238 5652
Mobile / WhatsApp: +971 50 748 1772

ONLINE

www.swbm-fittings.com
Brand: Bothwell

The information in this data sheet is provided in good faith and is believed to be accurate at the date of issue. Dimensions, weights and ratings are nominal and may vary with the manufacturer and production batch. It remains the responsibility of the purchaser to confirm that the product is suitable for the intended service conditions. Sunel Wala Building Materials Trading Co. LLC reserves the right to amend specifications without prior notice. This document does not form part of any contract of sale.