



SECTION I

MONOFLANGES

Index

- 1) introduction
- 2) applicable standards
- 3) select your own mono flange code
- 4) example of a mono flange
- 5) possibility to hook-up your flange in a cabinet (complete assembly)

Monoflanges

1. Introduction Monoflanges

The **Astava** monoflanges are part of the instrumentation scope of supply **Astava**. The general description of the valves are mentioned below.



Proces connection flanged:	1/2" up to 4"
Proces connections other:	RTJ, RF, SW, BW, Grayloc, Norsok
Instrument connections:	DIN 19213, NPT, BSP, G, ISO parallel, flanged
Packing material:	VITON, PTFE (TEFLON).
	GRAFOIL, SILICON, other on request.
Rating:	0 up to 690 barg, 0 up to 10.000 psi.
Materials:	AISI 316L, Inconel 625, Duplex, Hastelloy C-276.
	Monel 400, Monel K500, Monel 600.
	Other on request.
Design codes:	ASME/ANSI, BS. / ASTM.
	DIN, NACE MR-01-75.



Monoflanges

2. Applicable standards

STANDARD	APPLICATION
API 6D, Section 8	Preparations for shipping
ASME B1.20.1, ISO 228/1	NPT threads
ASME B16.34, Stoomwezen, AD Merkblätter, BS 1560	The minimum wall thickness of valve body, temperature / pressure ratings
ASME B16.5, DIN 2500, API 6A,B	Flange dimensions and Ratings
ASME B18.2.1, EN 3506	Transmitter Bolts
ASME B18.3, EN 3506	Transmitter Bolts
ASME B31.3, AD Merkblätter	Welding when performed
ASME B46.1	Stem roughness
ASTM / DIN 17440/ AFNOR	Material standards
BS 5501 Part 1, DIN 4102	Enclosure material
Cenelec EN 50014	Area classification
DIN 19213 facing, part 2 April 1980 (Draft IEC 61518, Type A), Rosemount integral concept , 33mm c-to-c	Interface between transmitter and Level-manifold
DIN 46319	Glands and plugs
EEMUA publication No. 182 (ISBN 085931 125 2)	Specification for Integral Block and bleed valve manifolds for direct connection to pipe work
NACE MR0175	Pressurized parts in contact with H ₂ S
EN 10204	Material certificates



Monoflanges

3. Select your own mono flange code and send your inquiry to RFQ@ASTAVA.COM

ASTAVA FLANGES					
Flange size					
1	Nominal flange size: 1/2" (DN15) acc. to ASME B16.5				
2	Nominal flange size: 3/4" (DN20) acc. to ASME B16.5				
3	Nominal flange size: 1" (DN25) acc. to ASME B16.5				
4	Nominal flange size: 1-1/2" (DN40) acc. to ASME B16.5				
5	Nominal flange size: 2" (DN50) acc. to ASME B16.5				
6	Nominal flange size 2 1/2" acc. to ASME B16.5				
7	Nominal flange size 3" (DN80) acc. to ASME B16.5				
8	Nominal flange size 3 1/2" acc. to ASME B16.5				
9	Nominal flange size 4" acc. to ASME B16.5				
Rating					
1	Flange rating: (150) LBS				
2	Flange rating: 300 / 600 LBS (equal acc to ASME B16.5 up to 3,5")				
3	Flange rating: 900, (1500) LBS				
4	Flange rating: (2500) LBS				
5	Flange rating: 150 / (600) LBS slotted boltholes only RF				
6	Flange rating: 900 / (2500) LBS slotted boltholes only RF				
7	Flange rating: (300) LBS (only for 4" and larger flanges)				
8	Flange rating: (400) LBS (only for 4" and larger flanges)				
9	API 10.000				
Process connection					
1	Process connection: Raised face				
2	Process connection: Ring type joint				
3	Process connection: Captive bolting raised face				
4	Process connection: Captive bolting ring type joint				
5	Flat Face ASME B16.5				
Instrument connection					
1	Instrument connection: 1/4-18 NPT (F)				
2	Instrument connection: 1/2-14 NPT (F)				
3	Instrument connection: DIN 3582-X-G1/4-19				
4	Instrument connection: DIN 3582-X-G1/2-14				
5	Instrument connection: Ring Type joint or Raised Face (Same Flange)				
6	Instrument connection: Flanged DIN 19213				
7	Instrument connection: Integral flanged c-to-c 33 mm				
8	Instrument connection: Flanged 2" (Double Flanged)				
9	Instrument connection: Flanged 3" (Double Flanged)				
Vent connection					
1	Vent connection: 1/4-18 NPT (F)				
2	Vent connection: 1/2-14 NPT (F)				
3	Vent connection: DIN 3582-X-G1/4-19				
4	Vent connection: DIN 3582-X-G1/2-14				
0	Vent connection: No vent connection				
Flowscheme					
0	-----> (adapter flange)				
1	Flow chart: single vent				
2	Flow chart: single block				
3	Flow chart: block-bleed				
4	Flow chart: block-bleed-block				
5	Flow chart: Other, not defined in this selection matrix				
6	Flow chart: single block- 2x outlet				
7	Flow chart: block-bleed-2x outlet				
8	Flow chart: block-block-bleed				
9	Flow chart: block-block-bleed-2x outlet				
Material and bonnet selection					
Body material	Other material	Stem material	O-ring seal	Temp. min / max Degr. C	
-01	AISI 316 (L)	AISI 316 (L)	AISI 316 Ti	PTFE	-160 / 230
-02	Alloy MNL400	Alloy MNL400	Alloy K500	PTFE	-160 / 230
-03	Alloy C-276	Alloy C-276	Alloy C-276	PTFE	-160 / 230
-05	AISI 316 (L)	AISI 316 (L)	AISI 316 Ti	Grafoil	-200 / 400
-06	AISI 316 (L)	AISI 316 (L)	AISI 316 Ti	Viton	-20 / 200
-10	Duplex, W. Nr. 1.4462	AISI 316 (L)	AISI 316 Ti	Viton	-20 / 200
-11	Alloy 254Smo	Alloy 254Smo	Alloy 254Smo	PTFE	-160 / 230
-12	Alloy 625	Alloy 625	Alloy 625	PTFE	-160 / 230
-23	Duplex, W. Nr. 1.4462	AISI 316 (L)	AISI 316 Ti	PTFE	-160 / 230
-55x	Duplex F60	Duplex F60	Duplex F60	Grafoil	-200 / 400
-x1	ASTM A350LF2	AISI 316 (L)	AISI 316 Ti	PTFE	-160 / 230
-x5	ASTM A350LF2	AISI 316 (L)	AISI 316 Ti	Grafoil	-200 / 400
Special					
/A	Bonnet Lower Seal, Anti Tamper, Dust ring G1/2				
+ MT	Mounting and testing of instrument. (Please specify instrument)				
/ SAM xxx	Sampling probe welded,length probe (mm), ID = .. OD =..				



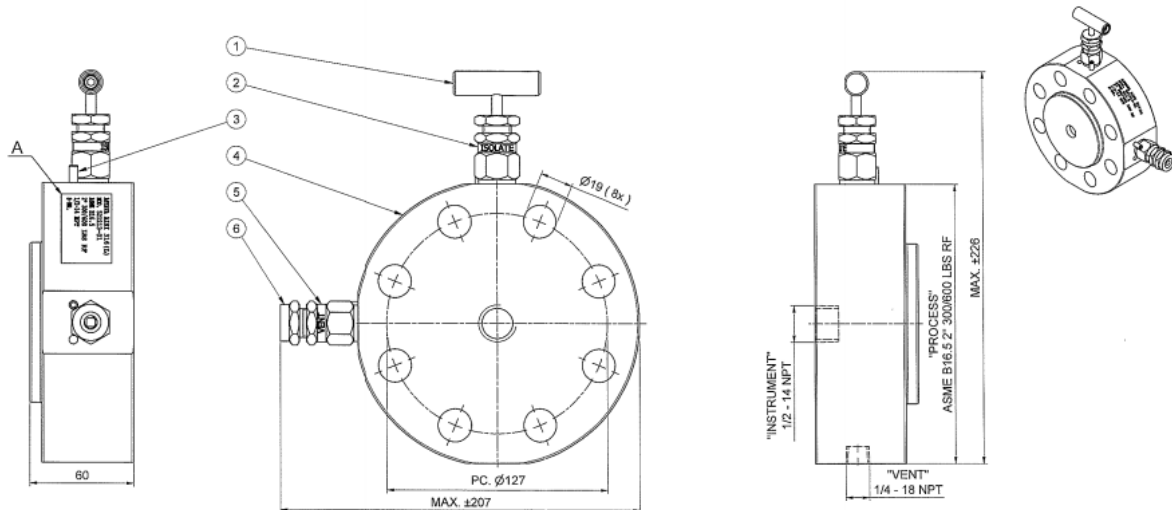
Monoflanges

4. An Example of a mono flange

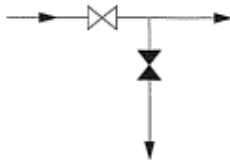
Model 521213-01

Flange size					
5	Nominal flange size: 2" (DN50) acc. to ASME B16.5				
Rating					
2	Flange rating: 300 / 600 LBS (equal acc to ASME B16.5 up to 3,5")				
Process connection					
1	Process connection: Raised face				
Instrument connection					
2	Instrument connection: 1/2-14 NPT (F)				
Vent connection					
1	Vent connection: 1/4-18 NPT (F)				
Flowscheme					
3	Flow chart: block-bleed				
Material and bonnet selction					
Body material	Other material	Stem material	O-ring seal	Temp. min / max Degr. C	
-01	AISI 316 (L)	AISI 316 (L)	PTFE	-160 / 230	

Drawing of above configuration as follows :



Flowscheme



Monoflanges

5. possibility to hook-up your flange in a cabinet (complete assembly)

The mono flanges as mentioned above are available in a wide range and configuration, like:

Sizes	up to 4"			
Rating	150 -2500 lbs 0 – 10.000 psi			
Materials	AISI 316(L)	Duplex	Alloy C-276	Super Duplex
	Alloy 254smo	Alloy 625	Alloy 825	

Also assembling and pressure testing of complete hook-ups including transmitters, junction boxes, heaters, instrument housings and connectors can be executed.

A few examples :



For more information please contact:

ASTAVA BV - MEPEL – THE NETHERLANDS
Tel: +31-522-237030
Fax: +31-522-237040
E-mail: rfq@astava.com
Internet: www.astava.com