

6 MEGASTAR

FORGED STEEL BALL VALVES



PED 97/23 EC



Certificate N°: RPS 0160304/01

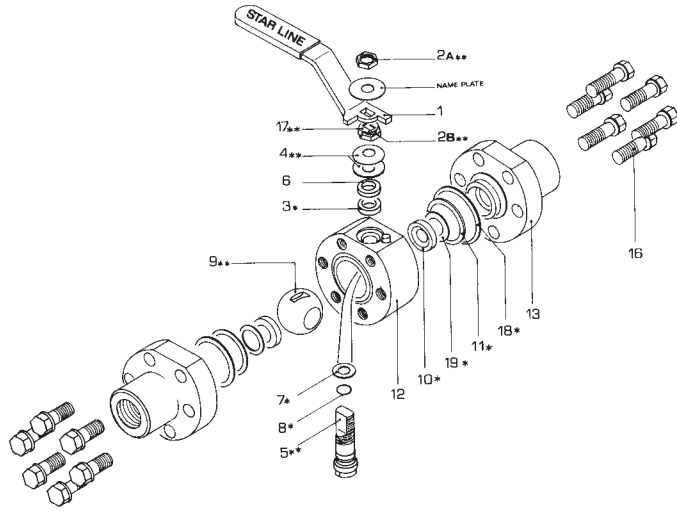
ATEX 94/9 CE



Tech. File N° ST01 ATEX



6D-0233



STARLINE Figure No.			STANDARD SEATS DEVLON "V"	163 NGG	165 NGG	166 NGG
			OPTIONAL SEATS DELRIN	163 DGG	165 DGG	166 DGG
			OPTIONAL SEATS KELP	163 KGG	165 KGG	166 KGG
ITEM	Q.TY	Part name Bezeichnung	Designation Componentes	A105/F316	LF2/F316	F316/F316
1	1	Handle Handhebel	Levier Maneta	C.S. Galvanized Plastic cover	C.S. Galvanized Plastic cover	C.S. Galvanized Plastic cover
2	2	Nut Mutter	Ecrou Tuerca	C.S. Cadmium Plated	S.S. 316	S.S. 316
3	1	Packing ring Stopbuchsenpackung	Guarniture Junta eje	Graphite	Graphite	Graphite
4	2	Spring washer Tellerfedern	Rondelle ressort Arandela	S.S. Special Spring	S.S. Special Spring	S.S. Special Spring
5	1	Antistatic stem Antistatische spindel	Tige antistatique Eje antiestatico	S.S. 316	S.S. 316	S.S. 316
6	1	Gland packing Druck ring	Foulloir Estopada	S.S. 316	S.S. 316	S.S. 316
7	1	Thrust washer Spindeldichtung	Rondelle butée Junta eje	Reinf. PTFE	Reinf. PTFE	Reinf. PTFE
8	1	«O» Ring stem «O» Ring spindel	Joint tonique Torica eje	VITON	VITON	VITON
9	1	Ball Kugel	Sphère Esfera	S.S. 316	S.S. 316	S.S. 316
10	2	Seats Sitzring	Sièges Asientos	DEVLON "V"	DEVLON "V"	DEVLON "V"
11	2	Body seal Gehäusedichtung	Joint de corps Junta cuerpo	GRAPHITE	GRAPHITE	GRAPHITE
12	1	Body Gehäuse	Corps Cuerpo	ASTM A105	ASTM A350 LF2	ASTM A182 F316
13	2	End connections Anschlußstutzen	Embout Terminales	ASTM A105	ASTM A350 LF2	ASTM A182 F316L
14	1	Stop-pin Anschlag	Butée Tope	S.S. 304	S.S. 304	S.S. 304
16	note 1	Bolts Gehäuseschraube	Vis Goujon	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8
17	1	Stop washer Sicherungsscheiße	Rondelle-frein Arandela de seguridad	S.S. 304	S.S. 304	S.S. 304
18	2	Body seal Gehäusedichtung	Joint de corps Junta de cuerpo	VITON	VITON	VITON
19	2	Ring - Seat Ring - Sitzring	Joints de sieges Junta asientos	PTFE	PTFE	PTFE

NOTE 1: for size 1/4" to 1" N. 6-6 bolts
for size 1.1/4" to 1.1/2" N. 8-8 bolts
for size 2" N. 10-10 bolts

NOTE 2: Other possible seats materials Peek - Vespel

- Suggested materials after 2 years service
- Empfohlene ersatzteile für 2 Jahres betrieb
- Pièces de rechange conseillées pour 2 ans de service
- Recambios aconsejados para 2 años de servicio

- Suggested materials after 5 years service
- Empfohlene ersatzteile für 5 Jahres betrieb
- Pièces de rechange conseillées pour 5 ans de service
- Recambios aconsejados para 5 años de servicio

DESCRIPTION

CONSTRUCTION: THREE PIECES BOLTED CONSTRUCTION - SOLID BALL - ANTI BLOW OUT PROOF STEM DESIGN - ENCAPSULATED SOFT SEATS - HIGH INTEGRITY SHUT-OFF AT LOW AND HIGH PRESSURE - ANTI-STATIC DEVICE - ISO 5211 ON THE TOP FOR EASY AUTOMATION - FIRE TEST APPROVED:

SIZE: 1/4" TO 2" FULL BORE
CLASS: FOR SIZE 1/4" ÷ 1" ASME 900 ÷ 2500 LSB or 6000 WOG
FOR SIZE 1.1/4" ÷ 2" ASME 900 ÷ 1500 or 4000 WOG
TEMPERATURE: -101° C UP TO +250° C
MATERIAL: ASTM A105 - LF2 - 316 - 316L - AND SPECIAL MATERIALS
DESIGN: ASME B16.34 - ASME B31.1 - BS5351 - P.E.D. 97/23/EC - ATEX 94/9 CE
MARKING: MSS SP25
CE 0038: ACCORDING TO DIRECTIVE 97/23/CE - MODULE H CATEGORY III - NOTIFIED BODY LLOYD'S REGISTERED CERTIFICATE NR. RPS 01060304/01

Ex IM2/II 2GD: ACCORDING TO ATEX 94/9 CE - TECHNICAL FILE NR. ST01 ATEX
TEST CERTIFICATE: UNI EN 10204 TYPE 3.1B UNLESS OTHERWISE REQUIRED
FIRE TEST APPROVED: BS6755 PART 2 - API607 - API6FA
SERVICES: FOR PETROLEUM, CHEMICALS, PETROLCHEMICALS, GAS APPLICATION AND ALLIED INDUSTRIES

FLOW DATA

The following flow rates were determined for ball valves in fully open position and a water temperature of 60°F (15°C).

Kv value is the full capacity flow rate through the ball valve in cubic metres per hour (m³/h) with a pressure drop of 1bar.

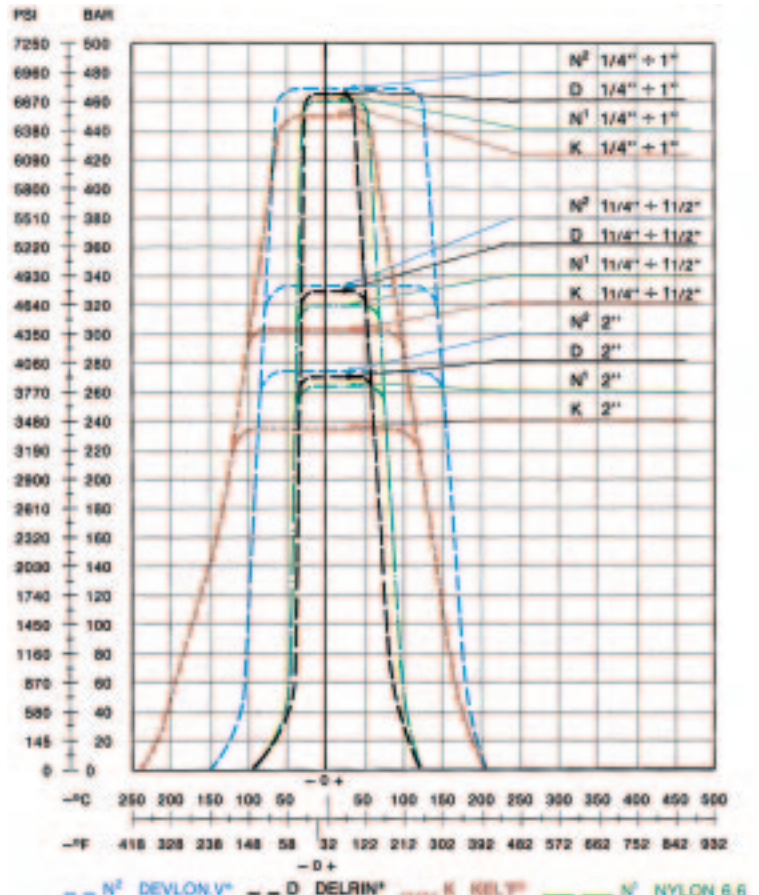
Cv value is the full capacity flow rate through the ball valve in gallons/min of water at 60°F with a pressure drop of 1 psi.

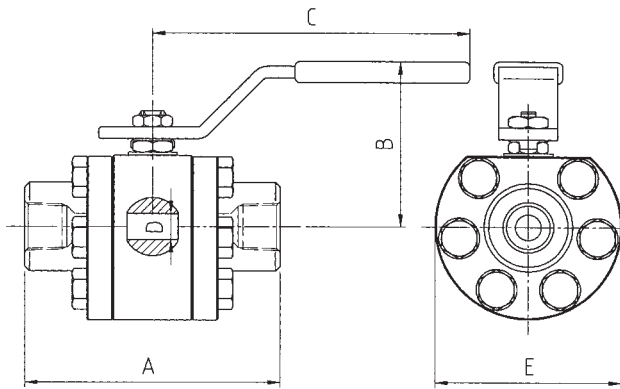
VALVE	Inches	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
SIZE	DN	8	10	15	20	25	32	40	50
Cv	G.P.M.	8	8	8	25	34	100	100	180
Kv	m³/h	6.8	6.8	6.8	21.3	29.1	85.5	85.5	153.8

BREAK AWAY TORQUE AT 200 BAR

VALVE	Inches	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
SIZE	DN	8	10	15	20	25	32	40	50
DEVLON "V"	Nm	25	25	25	40	55	120	120	145
SEATS	Inch/Lbs	222	222	222	355	488	1063	1063	1285

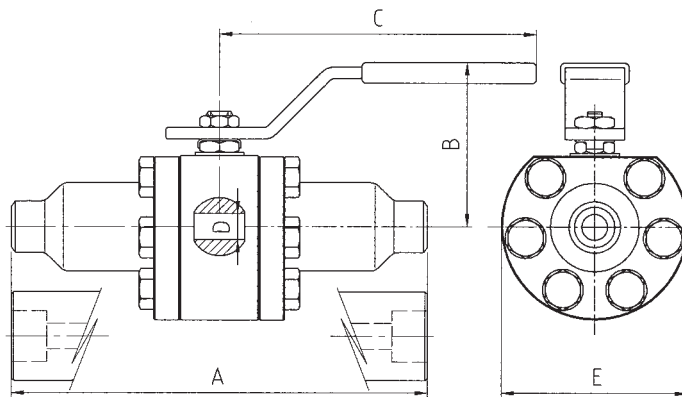
PRESSURE / TEMPERATURE LIMITATIONS OF SEAT SEAL





BSP Parallel: BS21RP - ISO 228/1 - ISO 7/1RP
BSP Taper: BS21RC - ISO 7/1RC - DIN 2999/1
NPT: ASME B1 20.1

FULL BORE									
ASME CLASS	VALVE SIZE		DIMENSION					ISO 5211	WEIGHT KG LBS
			A	B	C	D	E		
900 Lbs 1500 Lbs 2500 Lbs or 6000 WOG	DN	8	100	85	193	11.1	80	F03	3
	inch	1/4"	3.95"	3.35"	7.6"	0.44"	3.15"		6.6
	DN	10	100	85	193	11.1	80	F03	3
	inch	3/8"	3.95"	3.35"	7.6"	0.44"	3.15"		6.6
	DN	15	100	85	193	11.1	80	F03	3
	inch	1/2"	3.95"	3.35"	7.6"	0.44"	3.15"		6.6
	DN	20	127	95	193	15.5	98	F04	5
	inch	3/4"	5"	3.75"	7.6"	0.6"	3.85"		11
	DN	25	140	110	225	21	110	F05	6.5
	inch	1"	5.5"	4.3"	8.85"	0.83"	4.33"		14.4
900 Lbs 1500 Lbs or 4000 WOG	DN	32	170	140	350	34	135	F07	13.5
	inch	1.1/4"	6.7"	5.5"	13.78"	1.34"	5.32"		30
	DN	40	170	140	350	34	135	F07	13.5
	inch	1.1/2"	6.7"	5.5"	13.78"	1.34"	5.32"		30
	DN	50	200	150	350	43	150	F07	18.5
	inch	2"	7.87"	5.9"	13.78"	1.69"	5.9"		41



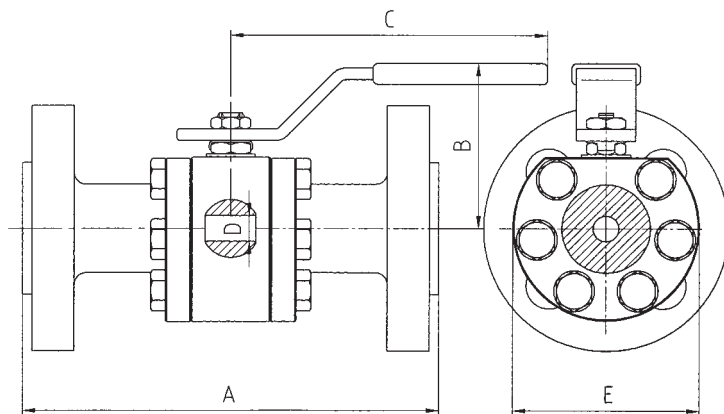
B.W. - P.E.: ASME B 16.25 Sch. 160 or XXS

S.W.: ASME B 16.11

Instruction for welding the valve on the line:

With the valve in open position tack-weld in four points on both ends and then complete the welding without desmantling the valve.

FULL BORE									
ASME CLASS	VALVE SIZE		DIMENSION					ISO 5211	WEIGHT KG LBS
			A	B	C	D	E		
900 Lbs 1500 Lbs 2500 Lbs or 6000 WOG	DN	8	216	85	193	11.1	80	F03	4
	inch	1/4"	8.5"	3.35"	7.6"	0.44"	3.15"		8.9
	DN	10	216	85	193	11.1	80	F03	4
	inch	3/8"	8.5"	3.35"	7.6"	0.44"	3.15"		8.9
	DN	15	216	85	193	11.1	80	F03	4
	inch	1/2"	8.5"	3.35"	7.6"	0.44"	3.15"		8.9
	DN	20	229	95	193	15.5	98	F04	6.5
	inch	3/4"	9"	3.75"	7.6"	0.6"	3.85"		14.4
	DN	25	254	110	225	21	110	F05	8
	inch	1"	10"	4.3"	8.85"	0.83"	4.33"		17.8
900 Lbs 1500 Lbs or 4000 WOG	DN	32	280	140	350	34	135	F07	16.5
	inch	1.1/4"	11"	5.5"	13.78"	1.34"	5.32"		36.5
	DN	40	305	140	350	34	135	F07	17
	inch	1.1/2"	12"	5.5"	13.78"	1.34"	5.32"		37.8
	DN	50	368	150	350	43	150	F07	23.5
	inch	2"	14.5"	5.9"	13.78"	1.69"	5.9"		52.2



FLANGES: in according to ASME B 16.5

FACE to FACE in according to ASME B 16.10

Note: when flanges are RF type of finish must be stated on the order

FULL BORE									
ASME CLASS	VALVE SIZE		DIMENSION					ISO 5211	WEIGHT KG LBS
			A	B	C	D	E		
900 Lbs 1500 Lbs	DN	15	216	85	193	11.1	80	F03	7
	inch	1/2"	8.5"	3.35"	7.6"	0.44"	3.15"		15.5
	DN	20	229	95	193	15.5	98	F04	9
	inch	3/4"	9"	3.75"	7.6"	0.6"	3.85"		20
	DN	25	254	110	225	21	110	F05	12
	inch	1"	10"	4.3"	8.85"	0.83"	4.33"		26.6
	DN	32	280	140	350	34	135	F07	22
	inch	1.1/4"	11"	5.5"	13.78"	1.34"	5.32"		48.8
	DN	40	305	140	350	34	135	F07	23
	inch	1.1/2"	12"	5.5"	13.78"	1.34"	5.32"		51
	DN	50	368	150	350	43	150	F07	34
	inch	2"	14.5"	5.9"	13.78"	1.69"	5.9"		75.5
2500 Lbs	DN	15	263	85	193	11.1	80	F03	8
	inch	1/2"	10.35"	3.35"	7.6"	0.44"	3.15"		17.8
	DN	20	273	95	193	15.5	98	F04	10.5
	inch	3/4"	10.75"	3.75"	7.6"	0.6"	3.85"		23.5
	DN	25	308	110	225	21	110	F05	13.5
	inch	1"	12.12"	4.3"	8.85"	0.83"	4.33"		30