

PARTS LIST AND MATERIAL SPECIFICATION

		6G610, 6G710, 6G110
1	INLET SEAT	ST.STL. BS EN 10088-3 1.4404 (316L)
2	PLUNGER/SEAL	ST.STL. BS EN 10088-3 1.4404 (316L) / TO SUIT APPLICATION
3	BODY	ST.STL. BS EN 10283 1.4408 (316) SA-351 CF8M
4	SPRING	ST.STL. BS EN 10270-3 1.4310 (302)
5	SPINDLE	ST.STL. BS EN 10088-3 1.4057 (431)
6	ADJUSTER	ST.STL. BS EN 10088-3 1.4401 (316)
7	CAP	ST.STL. BS EN 10088-3 1.4401 (316)
8	COVER	ST.STL.
9	WIRE & SEAL	ST.STL & LEAD

APPROVALS

AD 2000-Merkblatt A2: (TÜV Germany), Ref- TÜV.SV.**-728.9.5.D/G.0,78.p.

P.E.D. 2014/68/EU.

Type examination module B, Cert. No. 01 202 111-B-10016

Quality management system, module D, Cert. No. COV0812369/01

Designed in accordance with BS EN ISO 4126-1

Meeting the requirements of the A.S.M.E. Boiler & Pressure Vessel Code section VIII for air/gas.

UV Cert. of Authorisation: 35757

Capacities certified by the National Board of Boiler & Pressure Vessel Inspectors.

TECHNICAL DATA

Relieving pressure = Set pressure +10% (0.1 Bar.g. below 1.0 Bar.g)
 Reseating pressure = Set pressure -10% (0.3 Bar.g minimum)
 Maximum set pressure = 55.2 Bar.g (12 Bar.g Steam)

SUBJECT TO CLAMP PRESSURE RATING

Minimum set pressure = 0.48 Bar.g (A.S.M.E. 1.55 Bar.g)

Flow area = 70.9 mm²

Inlet bore diameter = 9.5 mm

BS Derated coefficient of discharge K_{dr} = 0.78

TÜV allotted outflow coefficient α_w = 0.78

NB Certified rated slope = 1.71 scfm/psia

BS Minimum lift at 10% overpressure = 3.5 mm

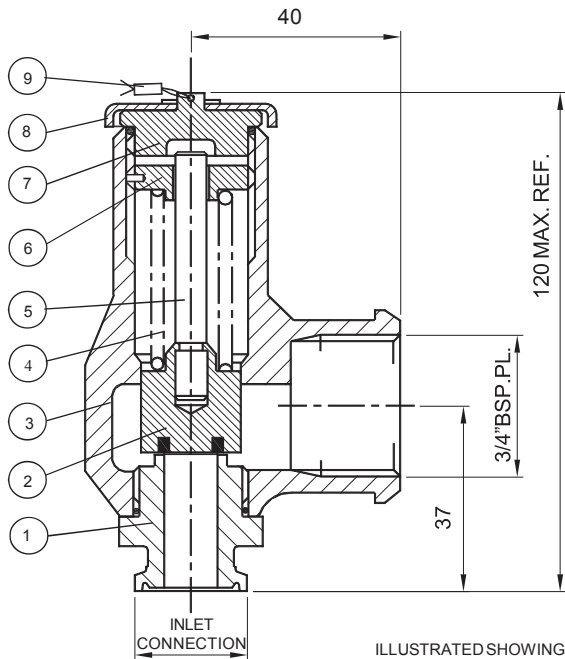
Temperature Range = Subject to seal material.

Maximum permissible built up back pressure = 10% of set pressure at or below which flow is not reduced.

Stable operation on flows down to 50% of valve rated capacity.

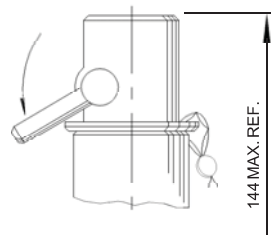
FOR FURTHER INFORMATION, INSTALLATION AND OPERATION INSTRUCTIONS, CONVERSION FACTORS ETC.

SEE TECHNICAL INFORMATION SECTION.



ILLUSTRATED SHOWING
TYPES
SEALED
NO EASING GEAR

ALTERNATIVE TOP FITTING



TYPE SL
SEALED LEVER
EASING GEAR



SEETRU LIMITED

ALBION DOCKSIDE WORKS, BRISTOL. BS1 6UT

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CLEAN SERVICE 10mm Nominal Bore
DIRECT SPRING LOADED ENCLOSED
DISCHARGE SAFETY VALVE
FOR COMPRESSED AIR, GASES & STEAM

SHEET 1 OF 3 SHEETS

ENCLOSED DISCHARGE
10mm NOMINAL BORE SERIES M/2

TYPE 64610, 64710, 64110 ST.STL.

FLOW CHART (P.E.D.) AIR

TO CALCULATE INTERMEDIATE FLOWS SEE TECHNICAL INFORMATION SECTION

FOR GREATER FLOWS REFER TO 13mm BORE TYPE 6G613 DATA SHEET, FOR LOWER FLOWS REFER TO SEETRU.

SET PRESSURE Bar.g	PRESSURE RANGE														
	0.48	1	1.55	2	3	4.5	5	10	15	20	30	33	40	50	55.2
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH BS EN 4126, AIR AT 15°C AND 1013 mbar Std. Litres/s	14	22	29	34	46	63	69	128	187	245	363	398	480	598	659
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH TÜV, AIR AT 0°C AND 1013 mbar Normal m³/h	48	77	102	121	162.4	224.5	245.3	452.4	659.5	866.7	1280.9	1405.2	1695.2	2109.5	2325

FLOW CHART (A.S.M.E.) AIR

SET PRESSURE Psig	23	30	40	50	75	100	150	200	300	400	500	600	700	800
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH A.S.M.E. AIR AT 60°F AND 14.7 psia/scfm	70	82	100	119	166	213	307	401	589	777	966	1154	1342	1530

* DISCHARGING TO ATMOSPHERE

FLOW CHART (P.E.D.) SATURATED STEAM

SET PRESSURE Bar.g	0.48	1	1.55	2	3	4	5	6	7	8	9	10	11	12
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH BS EN 4126 STEAM Kg/hr	37	59	76	95	126	158	189	220	251	282	313	344	374	405
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH TÜV STEAM Kg/hr	37	59	79	93	125	157	189	220	253	285	316	348	380	412

VALVE SELECTION CHART

Standard seat sizes shown, other sizes may be available

INLET CONNECTION	OUTLET CONNECTION	ORDERING CODE	TOP FITTING CODE	
			S	SL
1/2" CLAMP	G 3/4 (3/4" BSP PARALLEL)	6G610A	574C	583C
3/4" CLAMP		6G710A	575C	584C
1" CLAMP		6G110A	576C	585C

Example: Ordering code 6G610A 574C is St.Stl construction. Sealed, no easing gear, type S, with 1/2" Clamp inlet connection, 3/4" BSP parallel outlet connection with Perfluoroelastomer (Isolast®) seals & wirelocked.

Seal material: Last digit of ordering code calls up Perfluoroelastomer (Isolast®) seal.

When other material is required last digit changes to:

- 6. ETHYLENE PROPYLENE Temperature range (-40°C to 150°C)
- 8. PERFLUOROELASTOMER (ISOLAST®) Temperature range (-15°C to 190°C)

For advice on seal material selection refer to Technical Information Section A.

APPLICATION

- Safety valve for food industry & other hygienic applications including clean steam & gas applications.
- For protection of installations in which clean service is required only on the inlet.
e.g. normal operation wetted parts.
- Generally in accordance with 'ASME BPE 2005 Bioprocessing Equipment'.
- Economic design giving small compact size, with high discharge capacities.
- Elastomer soft sealing for high level sealing tightness at operating pressure, with minimum leakage for cost effective operation.

SURFACE FINISH

Process Contact Surface

In accordance with ASME BPE-2005 Table SF-5.

Surface designation R_a Max 15 μinches, 0.4 μm, Electropolished.

Other Surfaces

Not greater than 60 μinches, 1.5 μm.

SEAL MATERIAL

Elastomer soft sealing specifically developed for food & pharmaceutical industries.

Compliant to

- FDA 21 CFR 177.2600
- United States Pharmacopoeia (USP) Class VI
- SP3A Sanitary Standards for Multiple Use Rubber Dairy Equipment No 18-03.

CONNECTIONS

Inlet

Tri-Clamp® compatible generally in accordance with ASME BPE 2005 & BS 4825-3.

Outlet

Pipe threads (G) where pressure tight joints are not made on the thread in accordance with BS EN ISO 228. For other threads & clamp connections consult Seetru.

VALVE TYPE OPTIONS:

- 6G610A = TUV, B.S. (P.E.D.)
- 6G710A = A.S.M.E. & N.B.
- 6G110A = A.S.M.E. & N.B., TUV, B.S. (P.E.D.)



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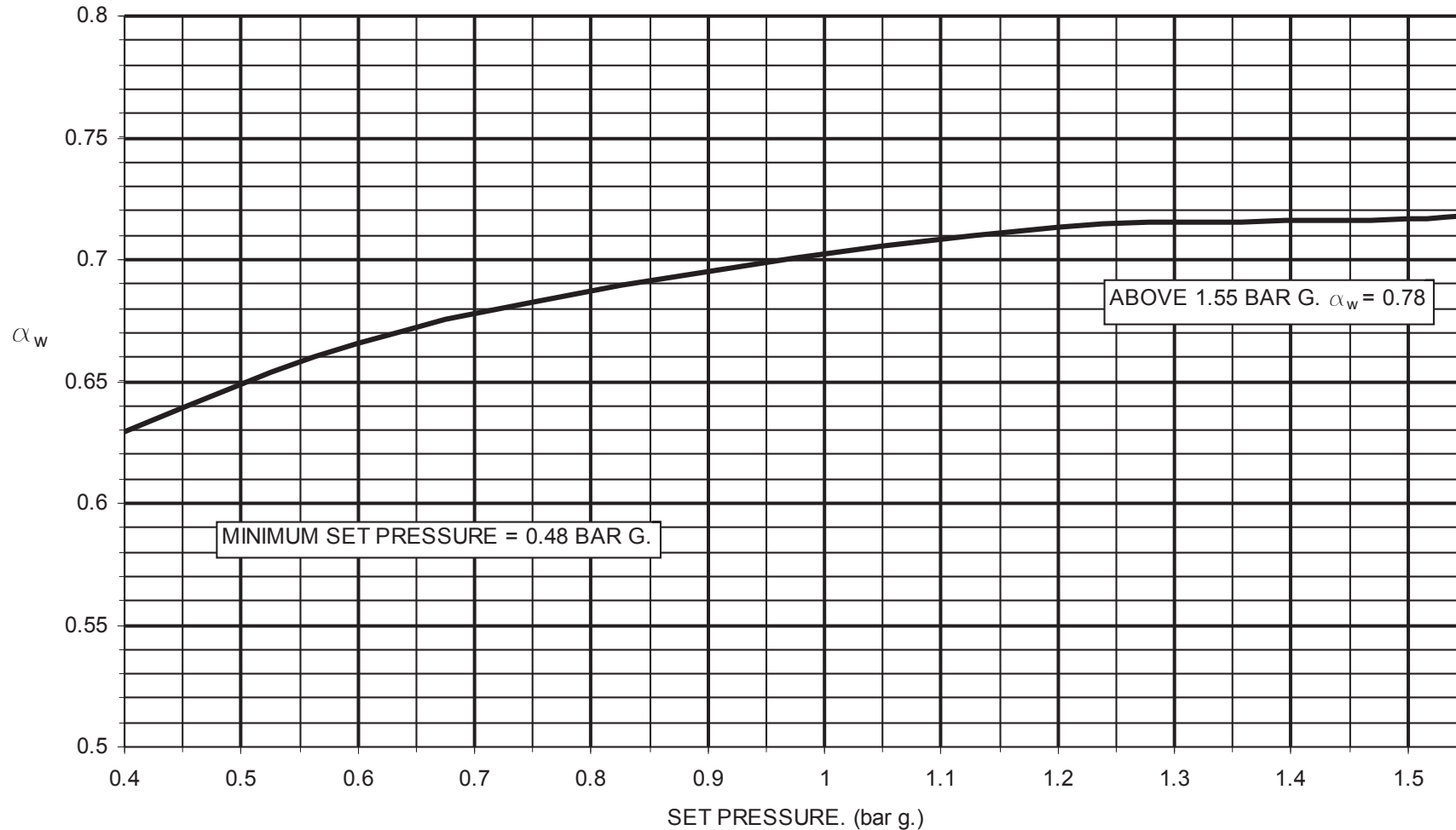
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SHEET 2 OF 3 SHEETS

ENCLOSED DISCHARGE
 10mm NOMINAL BORE SERIES M/2

TYPE 64610, 64710, 64110 ST. STL.

ALLOTTED OUTFLOW COEFFICIENT FOR SET PRESSURES BELOW 1.55 BAR G.



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