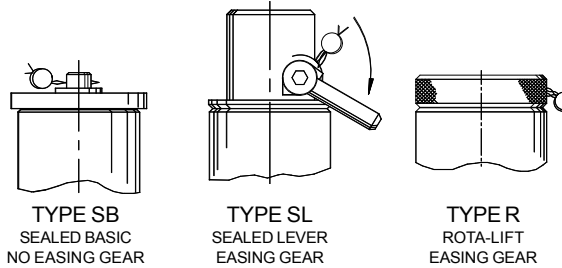


ILLUSTRATED SHOWING  
TYPE L  
LEVER LIFT  
EASING GEAR  
(OPTION NOT AVAILABLE AS 94620 TYPE)

### ALTERNATIVE TOP FITTINGS



### PARTS LIST & MATERIAL SPECIFICATION

		93620	94620**
1	SEAT	BRASS	ST.STL.
2	DISC	ST.STL. 316	ST.STL. 440B
3	BALL	ST.STL.	
4	DISC HOLDER	ST.STL.	
5	PLUNGER	ST.STL.	
6	BODY	ST.STL.	
7	SPRING HOUSING	BRASS	ST.STL.
8	SPRING	ST.STL.	
9	ADJUSTER	BRASS	ST.STL.
10	SPINDLE	ST.STL.	
11	CAP	BRASS	ST.STL.
12	WIRE & SEAL	ST.STL. & LEAD	
13	LEVER	BRASS	ST.STL. *
14	O'RING	TO SUIT APPLICATION	

\* TYPE SL ONLY  
\*\* 94620 TYPE VALVES, SEE TYPE SL' OPTION NOTES

### APPROVALS

Designed in accordance with BS EN ISO 4126:1.  
TÜV Approved:- Ref- TÜV.SV.\*\*-1016.20.D/G.0,80.p. For 4-28 Bar.g Below 4 Bar.g see ' $\alpha_w$  vs Set Pressure' chart.  
93620 type materials meet the requirements of BAM (Germany) for oxygen service.  
P.E.D. 2014/68/EU  
Type examination module B, Cert. No. 01 202 642-B-10017  
Quality management system module D, Cert No. COV0812369/01

### 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 below 3.0 Bar.g  
Maximum set pressure = 28.0 Bar.g  
Minimum set pressure = 0.3 Bar.g  
Flow area = 314 mm<sup>2</sup>  
Inlet bore diameter = 20 mm  
TÜV allotted outflow coefficient  $\alpha_w$  = 0.80  
TÜV allotted outflow coefficient  $\alpha_w$  = Below 4.0 Bar.g see ' $\alpha_w$  vs Set Pressure' chart.  
Leak tightness at 90% set pressure to API 527 and in accordance with BS6759 Part 3 1984, Table 9 Grade 2.  
Greater leak tightness may be achieved on request.  
Maximum temperature = 250°C Note: For sealed top fittings, max. temp. dependent on seal material.  
Minimum temperature = -196°C subject to material specification.  
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.

SHEET 1 OF 3 SHEETS



## SEETRU LIMITED

ALBION DOCKSIDE WORKS, BRISTOL. BS1 6UT  
TELEPHONE +44 (0) 117 930 6100, FAX +44 (0) 117 929 8193  
www.seetru.com info@seetru.com

20mm Nominal Bore METAL SEAL  
DIRECT SPRING LOADED ENCLOSED  
DISCHARGE SAFETY VALVE FOR  
COMPRESSED AIR, GASES & STEAM

ENCLOSED DISCHARGE  
20mm NOMINAL BORE SERIES  
  
TYPE 93620 BRASS  
TYPE 94620 ST.STL.

## FLOW CHART

-TO CALCULATE INTERMEDIATE FLOWS SEE TECHNICAL INFORMATION SECTION

- FOR GREATER FLOWS REFER TO 25mm BORE TYPE 93625 DATA SHEET. FOR LOWER FLOWS REFER TO 15mm BORE TYPE 93615 DATA SHEET.

SET PRESSURE Barg	0.3	0.5	1.0	2.0	3	4	5	6	7	8	9	10	15	20	25	28
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH BS6759, AIR AT 15°C AND 1013 mbar std. Litres/s	52.2	66.8	95	157.6	208	262	315	368	421	474	527	580	846	1112	1378	1537
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH BS6759 PART 1, STEAM Kg/h	140	182	275.7	429.8	569	714.2	859.3	1004.5	1149.6	1294.8	1439.9	1585	2310.8	3036.5	3762.2	4197.6
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH TUV, AIR AT 0°C AND 1013 mbar Normal m <sup>3</sup> /h	174.4	238	354	553.8	738.4	926.7	1115	1303.3	1491.6	1679.9	1868.3	2056.6	2998.2	3939.8	4881.4	5446.4
RATED DISCHARGE * CAPACITY IN ACCORDANCE WITH TUV, STEAM Kg/h	145.3	188.7	278.4	437.8	576.3	718	859.8	1000	1141.8	1282.8	1423.1	1562.6	2261.3	2956.8	3654.5	4077.6

\* DISCHARGE TO ATMOSPHERE

## O'RING SEAL CHART

O'RING MATERIAL	10th DIGIT	MAX. STATIC TEMP. °C	MIN. STATIC TEMP. °C
NITRILE	1	150	-30
VITON®	3	250	-20
SILICONE	4	250	-50
NEOPRENE	5	120	-40
E.PROPYLENE	6	150	-40
# P.T.F.E.	7	250	-196

Note:

For valve **Type L**, O'rings not fitted. '0' indicates that no O'rings are required.

For valve **Types SB & SL**, digits '1 - 7' indicates the required O'ring material dependent on the maximum / minimum static temperature.

Example:

Ordering code 93620A 413 3 is Brass seated, sealed leverlift **Type SL**, with 1" BSP parallel MALE inlet connection, 2" BSP parallel outlet connection, with Viton® O'ring seals.

# For cryogenic service **TYPE S** valves only  
**TYPE 94620 VALVES ARE NOT SUITABLE FOR CRYOGENIC SERVICE. USE 93620 TYPE S.**

## VALVE SELECTION CHART

Standard thread sizes shown, other sizes may be available

INLET CONNECTION	OUTLET CONNECTION	ORDERING CODE	TOP FITTING CODE			
			SB	SL**	L**	R
G 1 (1" BSP PARALLEL MALE)	G 2 (2" BSP PARALLEL)	93620A	133	413	333	213
R 1 (1" BSP TAPER MALE)		94620A	134	414	334	214
G 3/4 (3/4" BSP PARALLEL FEMALE)		93620D 94620D	130	410	330	210

Example 1:

Ordering code 93620A 333 0 is Brass seated, Lever lift Type L, with 1" BSP parallel MALE inlet connection, 2" BSP parallel outlet connection.

Example 2:

Ordering code 93620D 330 0 is Brass seated, Lever lift Type L, with 3/4" BSP parallel FEMALE inlet connection, 2" BSP parallel outlet connection.

\*\* LEVER LIFTING VALVES

**FOR 94620 VALVES, SEALED LEVER TYPE SL AVAILABLE ONLY.  
FOR 93620 VALVES, OPEN LEVER TYPE L AVAILABLE ONLY.**



# SEETRU LIMITED

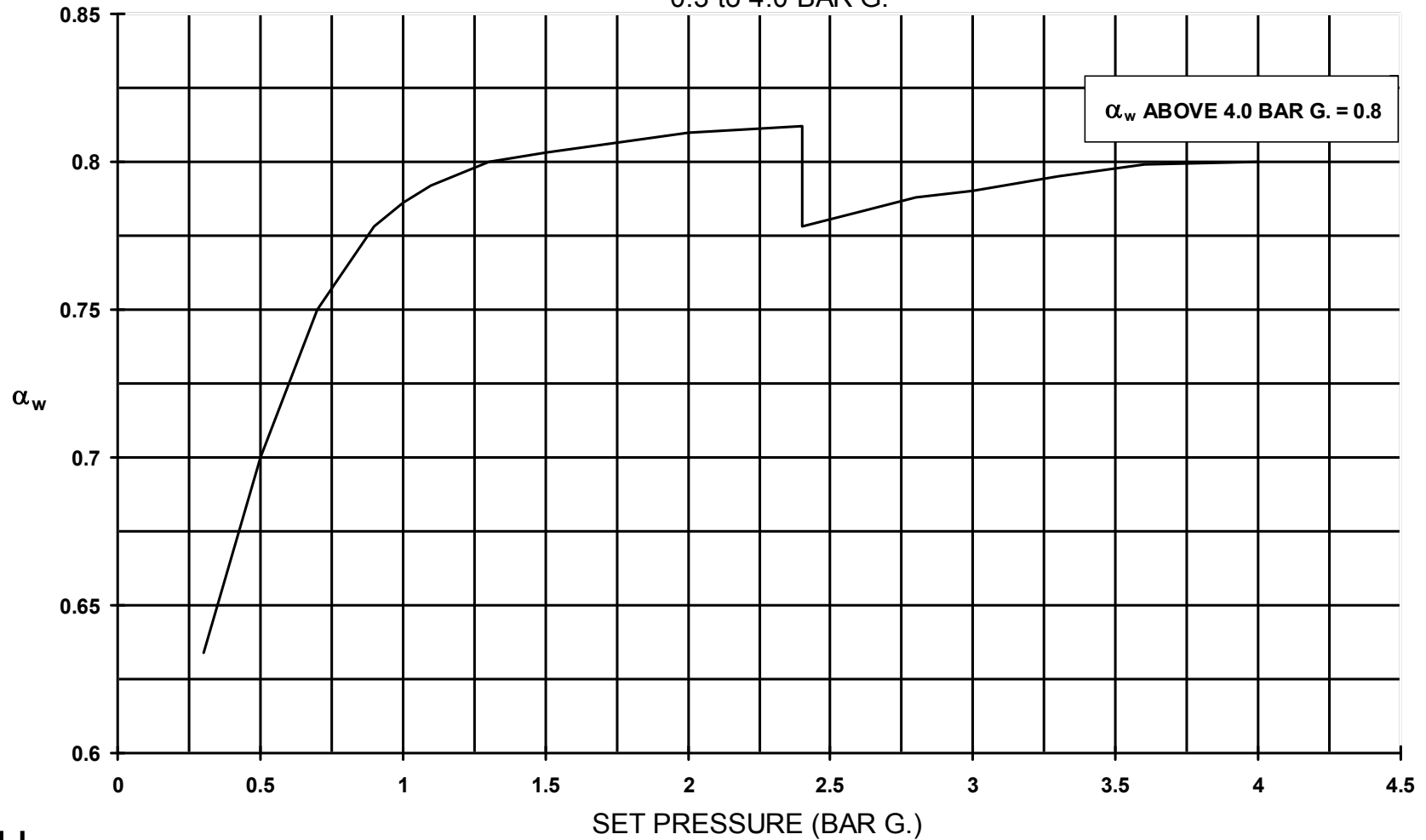
ALBION DOCKSIDE WORKS, BRISTOL. BS1 6UT  
TELEPHONE +44 (0) 117 930 6100, FAX +44 (0) 117 929 8193  
www.seetru.com info@seetru.com

20mm Nominal Bore METAL SEAL  
DIRECT SPRING LOADED ENCLOSED  
DISCHARGE SAFETY VALVE FOR  
COMPRESSED AIR, GASES & STEAM

ENCLOSED DISCHARGE  
20mm NOMINAL BORE SERIES  
  
TYPE 93620 BRASS  
TYPE 94620 ST.STL.

SHEET 2 OF 3 SHEETS

$\alpha_w$  vs SET PRESSURE CHART  
SEETRU SAFETY RELIEF VALVE 93620 / 94620  
0.3 to 4.0 BAR G.



**SEETRU LIMITED**  
ALBION DOCKSIDE WORKS, BRISTOL. BS1 6UT  
TELEPHONE +44 (0) 117 930 6100, FAX +44 (0) 117 929 8193  
www.seetru.com info@seetru.com

20mm Nominal Bore METAL SEAL  
DIRECT SPRING LOADED ENCLOSED  
DISCHARGE SAFETY VALVE FOR  
COMPRESSED AIR, GASES & STEAM

SHEET 3 OF 3 SHEETS

ENCLOSED DISCHARGE  
20mm NOMINAL BORE SERIES  
TYPE 93620 BRASS  
TYPE 94620 ST.STL.