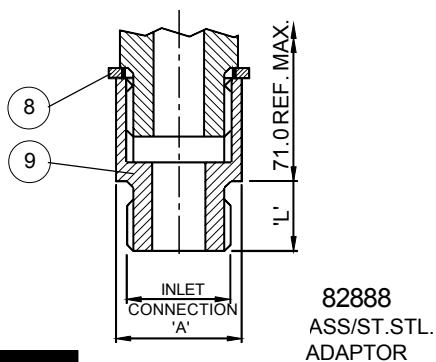
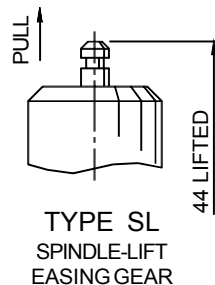


ILLUSTRATED SHOWING  
**81888**  
 TYPE R  
 ROTA-LIFT  
 EASING GEAR



**82888**  
 ASS/ST.STL.  
 ADAPTOR



TYPE SL  
 SPINDLE-LIFT  
 EASING GEAR

## PARTS LIST & MATERIAL SPECIFICATION

|   |                | 81888, 81788, 81188               | 82888, 82788, 82188 |
|---|----------------|-----------------------------------|---------------------|
| 1 | BODY           | BRASS BS EN 12164 CW614N          |                     |
| 2 | ELASTOMER SEAL | VITON                             |                     |
| 3 | VALVE DISC     | BRASS BS EN 12164 CW614N          |                     |
| 4 | SPRING         | ST.STL BS EN 10270-3 1.4310 (302) |                     |
| 5 | ADJUSTER       | BRASS BS EN 12164 CW614N          |                     |
| 6 | NAMEPLATE      | AL.ALLOY                          |                     |
| 7 | CAP            | BRASS BS EN 12164 CW614N          |                     |
| 8 | DOWTY SEAL     | N/A                               | VITON               |
| 9 | ADAPTOR        | N/A                               | ST.STL.             |

## APPROVALS

AD 2000-Merkblatt A2: (TÜV GERMANY) TÜV.SV.12-893.8.D/G.\*.p (\* = Variable  $\alpha_w$  below 3 Bar.g)  
 Designed in accordance with BS EN ISO 4126-1 & BS 6759 Part 2, but not approved.  
 P.E.D.97/23/EC  
 Type examination module B, Cert No. 01 202 642-B-10015  
 Quality management system module D, Cert. No. EDS 0002011/01  
 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 below 3.0 Bar.g) |
| Maximum set pressure                            | = 21 Bar.g                                      |
| Minimum set pressure                            | = 0.55 Bar.g (A.S.M.E. 3.0 Bar.g)               |
| Flow area                                       | = 50.27 mm <sup>2</sup>                         |
| Inlet bore diameter                             | = 8mm   |
| Temperature range                               | = -15°C to 200°C                                |
| TÜV Derated coefficient of discharge $\alpha_w$ | = 0.67 From 3 Bar.g Below 3 Bar.g see graph.    |
| NB Rated discharge coefficient $K_d$            | = 0.748   |
| Minimum lift at 10% overpressure                | = 1.4mm   |

FOR FURTHER TECHNICAL INFORMATION, CONVERSION FACTORS, INSTALLTION AND OPERATING INSTRUCTIONS ETC. SEE TECHNICAL INFORMATION SECTION.



**SEETRU LIMITED**  
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 www.seetru.com enquires@seetru.com

8mm Nom. Bore BRASS CONSTRUCTION  
 DIRECT SPRING LOADED ATMOSPHERIC  
 DISCHARGE SAFETY VALVE FOR  
 COMPRESSED AIR OR GASES.

SERIES E VALVE  
 TYPE 81888, 81788, 81188  
 BRASS  
 TYPE 82888, 82788, 82188  
 BRASS/ST.STL.

SHEET 1 OF 3 SHEETS

## FLOW CHART (P.E.D.)

- TO CALCULATE INTERMEDIATE FLOWS SEE TECHNICAL INFORMATION SECTION

-( FOR GREATER FLOWS REFER TO 10mm BORE TYPE 81810 DATA SHEET, FOR LOWER FLOWS REFER TO 6mm BORE TYPE 81806 DATA SHEET ).

| SET PRESSURE Bar.g   | PRESSURE RANGE BELOW 3 BAR.G |      |      |      | PRESSURE RANGE ABOVE 3 BAR.G |       |       |       |       |       |       |       |       |       |       |       |       |     |     |
|--|------------------------------|------|------|------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
|  | 0.55                         | 1    | 2    | 3    | 3                            | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 17  | 21  |
| RATED DISCHARGE CAPACITY IN ACCORDANCE WITH BS EN 4126, AIR AT 15°C AND 1013 mbar Std.Litres/s | 9                            | 12   | 20   | 27   | 28                           | 35    | 42    | 49    | 57    | 64    | 71    | 78    | 85    | 92    | 99    | 107   | 114   | 128 | 156 |
| RATED DISCHARGE CAPACITY IN ACCORDANCE WITH TÜV, AIR AT 0°C AND 1013mbar Normal m³/h           | 31.6                         | 44.5 | 70.7 | 94.9 | 98.9                         | 124.1 | 149.4 | 174.7 | 199.8 | 225.1 | 250.3 | 275.5 | 300.8 | 326.0 | 351.2 | 376.5 | 401.7 | 452 | 553 |

BS CALCULATIONS ARE FOR GUIDANCE ONLY

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

| SET PRESSURE Psig   | 44 | 50 | 60 | 70 | 80  | 90  | 100 | 110 | 120 | 130 | 140 | 150 | 200 | 250 | 300 | 305 |
|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RATED DISCHARGE CAPACITY IN ACCORDANCE WITH A.S.M.E. AIR AT 60°F AND 14.7 psia/scfm | 67 | 74 | 86 | 98 | 110 | 121 | 133 | 145 | 157 | 168 | 180 | 192 | 251 | 309 | 368 | 373 |

## VALVE TYPE OPTIONS:

81888, 82888 = TUV, B.S. (P.E.D.)  
 81788, 82788 = A.S.M.E. & N.B.  
 81188, 82188 = A.S.M.E. & N.B., TUV, B.S. (P.E.D.)

## VALVE SELECTION CHART

| # | INLET CONNECTION          | ORDERING CODE  | TOP FITTING CODE |      | 81 TYPE DIM'N 'A' A/F HEX (mm) | 82 TYPE DIM'N 'A' A/F HEX (mm) | 81 TYPE 82 TYPE INLET THRD DIM'N 'L' |
|---|---------------------------|--|------------------|------|--------------------------------|--------------------------------|--------------------------------------|
|   |                           |  | R                | SL   |                                |                                |                                      |
| # | G 1/4 (1/4" BSP PARALLEL) | 81888<br>81788<br>81188<br><br>82888<br>82788<br>82188 | 1213             | 0413 | 19.0                           | 25.6                           | 10                                   |
| # | R 1/4 (1/4" BSP TAPER)    |  | 1223             | 0423 |                                |                                | 12                                   |
| # | 1/4" NPT                  |  | 1233             | 0433 |                                |                                | 12                                   |
|   | G 3/8 (3/8" BSP PARALLEL) |  | 1243             | 0443 | 20.6                           |                                | 10                                   |
|   | R 3/8 (3/8" BSP TAPER)    |  | 1253             | 0453 | 19.0                           |                                | 12.5                                 |
|   | 3/8" NPT                  |  | 1263             | 0463 | 19.0                           |                                | 15.3                                 |
|   | G 1/2 (1/2" BSP PARALLEL) |  | 1273             | 0473 | 24.0                           |                                | 12                                   |
|   | R 1/2 (1/2" BSP TAPER)    |  | 1283             | 0483 |                                |                                | 19                                   |
|   | 1/2" NPT                  |  | 1293             | 0493 |                                |                                | 19                                   |

Example: Ordering code 81888 121 3 is a, Rota-lift type construction with 8mm bore, 1/4" BSP Parallel inlet connection and Viton® seals.

Note: Standard seal Viton®, other materials may be available.

# = Max. tightening torque 14Nm.

SHEET 2 OF 3 SHEETS



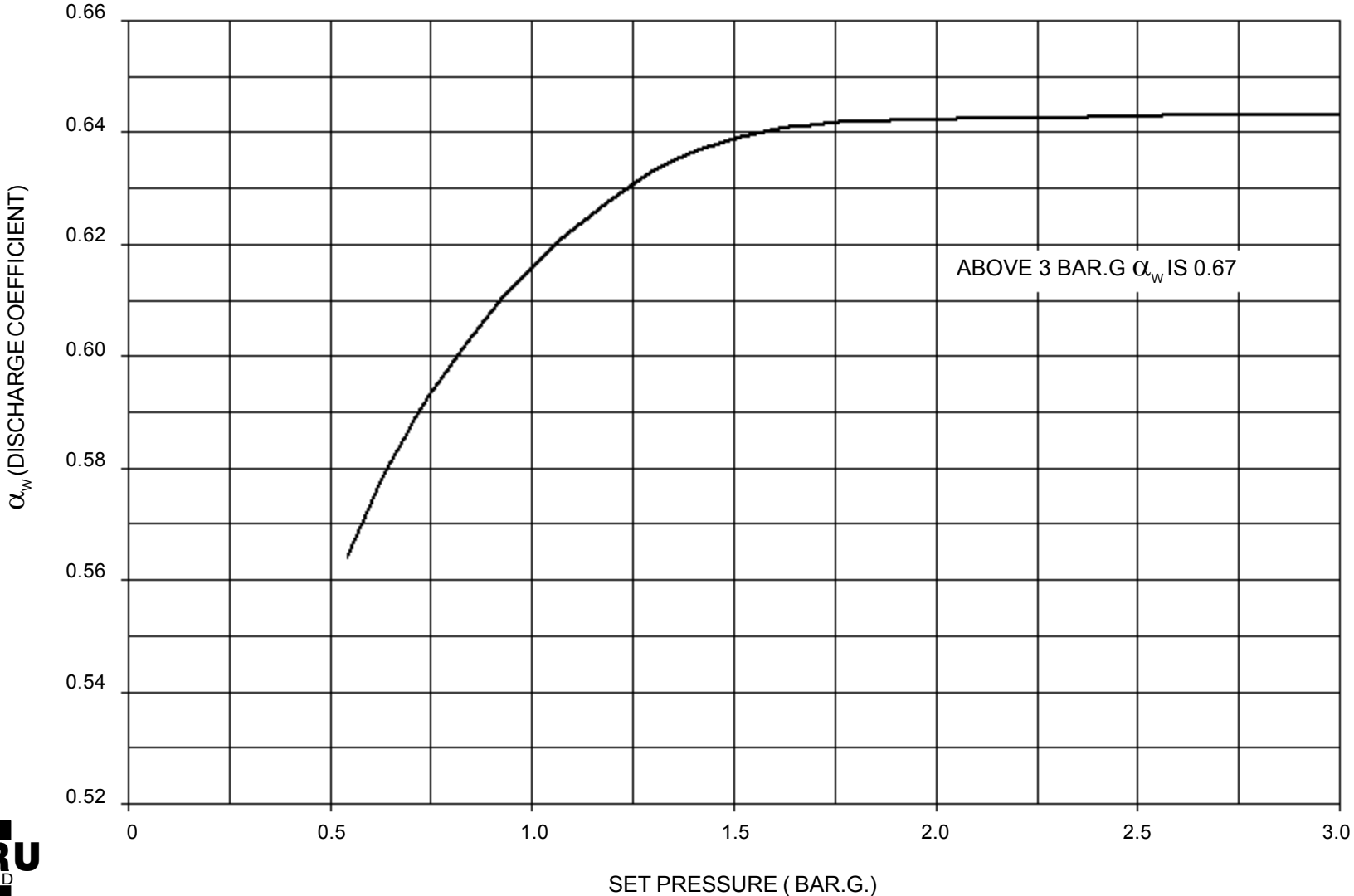
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 BRASS  
 TYPE 82888, 82788, 82188  
 BRASS/ST.STL.

PRESSURE/DISCHARGE CURVE FOR VALVE 81888  
0.55 - 3.0 BAR.G.



ABOVE 3 BAR.G  $\alpha_w$  IS 0.67



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SHEET 3 OF 3 SHEETS