

**PRESSURE REDUCING VALVE
DIRECT ACTING
PRV25I – Stainless steel (CF8M)**

DESCRIPTION

The ADCA PRV25I series direct acting pressure reducing valves are designed for use on steam, compressed air and other gases.

They are suitable for reducing steam pressure at the point of use on laundry machines, dyeing, food industries, sterilizers, etc.

Connections are female screwed or flanged.

MAIN FEATURES

Compact design.

Bellows specially designed for high durability.

Non rising stem regulating knob.

Built-in strainer.

OPTIONS: Regulating screw with top cap.

USE: Saturated steam, compressed air and other gases compatible with the construction.

AVAILABLE MODELS:
 PRV25 I – metal to metal seating
 PRV25IG – soft valve
 PRW25I – soft valve balanced

RECOMMENDED APPLICATIONS :
 PRV25I – steam and compressed air
 PRV25IG – steam and compressed air where tight off is required
 PRW25I – water, compressed air

SIZES: ½", ¾", 1"; DN15, DN 20 and DN 25.

CONNECTIONS: Female screwed ISO7/1Rp(BS 21) . Flanged EN 1092-1 PN40 or ANSI.

INSTALLATION: Horizontal installation.
 An "Y" strainer should be provided upstream the valve.
 See IMI, installation and maintenance instructions.



| CE MARKING (PED - European Directive 97/23/EC) | |
|--|--------------------------|
| PN 25 | Category |
| DN 15 to 25 | SEP - art. 3, paragraph3 |

LIMITING CONDITIONS

| | PRV25I | PRV25IG | PRW25I |
|-------------------------|----------|----------|----------|
| Body design conditions | PN25 | PN25 | PN25 |
| Max.upstream pressure | 17 bar | 17 bar | 14 bar |
| Max.downstream pressure | 8,6 bar | 8,6 bar | 8,6 bar |
| Min.downstream pressure | 0,14 bar | 0,14 bar | 0,35 bar |
| Max.design temperature | 210°C | 180°C | 75°C |
| Max.cold hydraulic test | 38 bar | 38 bar | 38 bar |
| Max.reducing ratio | 10:1 | 10:1 | 10:1 |

CAPACITIES

(See selection table)

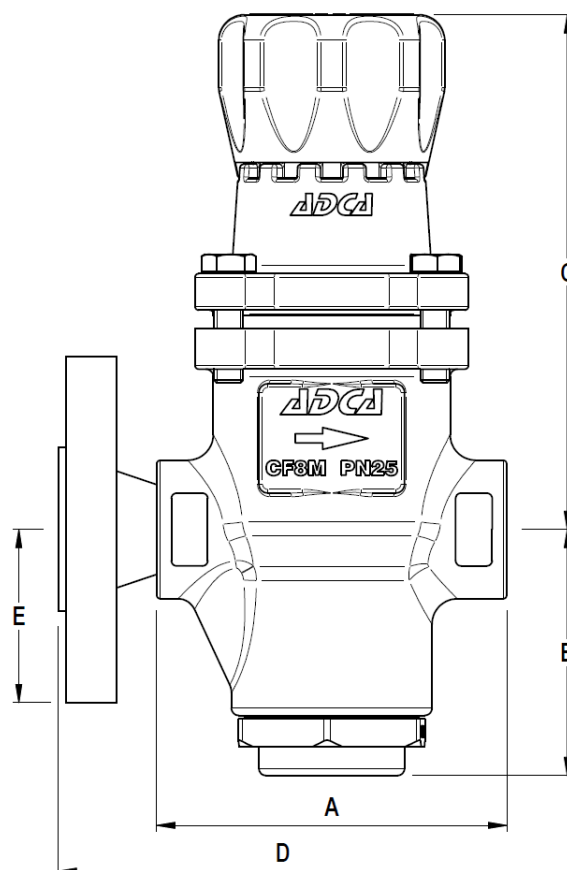
| Valve Size | 15 | 20 | 25 |
|------------|-----|-----|-----|
| KVs | 1,7 | 2,6 | 3,1 |

PRESSURE RANGES

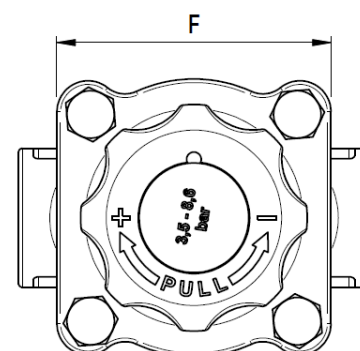
| Spring colour | Blue * | Yellow ** | Green | Red |
|----------------|------------|------------|-----------|-----------|
| Red.Press. bar | 0,35 - 1,7 | 0,14 - 1,7 | 1,4 - 4,0 | 3,5 - 8,6 |

*Applicable only on the PRW ; ** Appl.only on the PRV

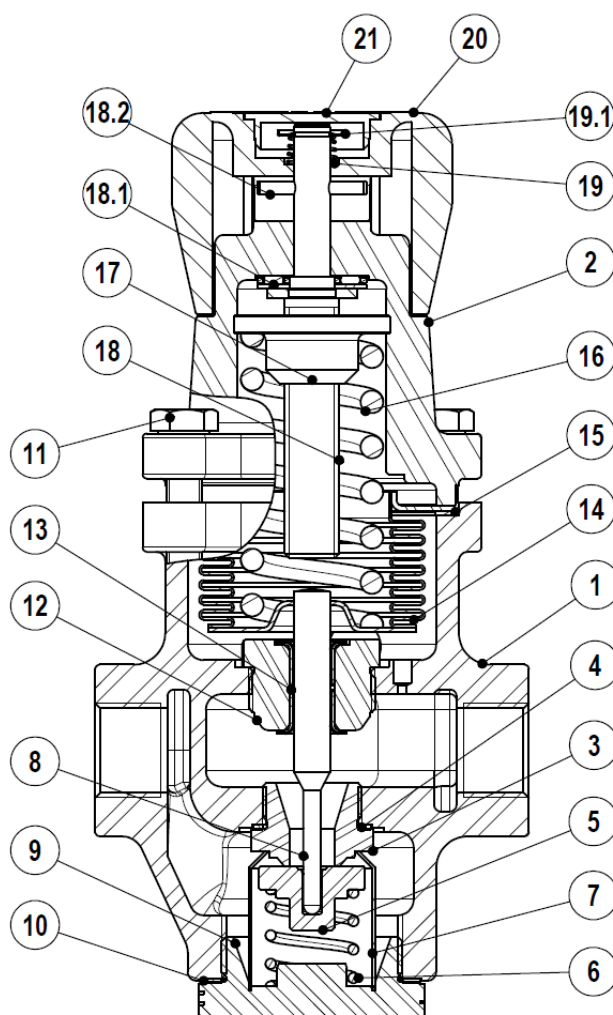
Where control spring ranges overlap,always use the lower range to give better control and precision.



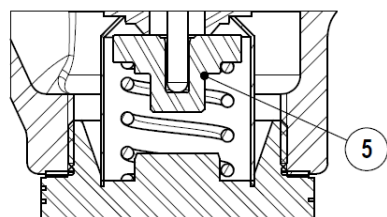
| DIMENSIONS (mm)-Screwed | | | | | | EN1092-1 Flanges | | |
|-------------------------|----|------|-----|----|----------|------------------|------|----------|
| SIZE DN | A | B | C | F | WGT. Kgs | D | E | WGT. Kgs |
| 1/2" | 96 | 68,5 | 141 | 74 | 3 | 150 | 47,5 | 4,4 |
| 3/4" | 96 | 68,5 | 141 | 74 | 3 | 150 | 52,5 | 5 |
| 1" | 96 | 68,5 | 141 | 74 | 2,9 | 160 | 57,5 | 5,5 |



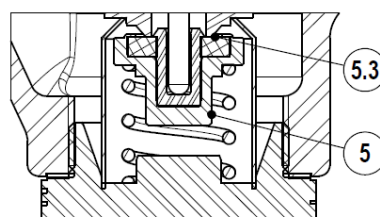
| MATERIALS | | |
|-----------|----------------------|----------------------|
| POS. | DESIGNATION | MATERIAL |
| 1 | VALVE BODY | CF8M / 1.4408 |
| 2 | COVER | CF8M / 1.4408 |
| 3 | *SEAT | AISI 316 / 1.4401 |
| 4 | *GASKET | COPPER |
| 5 | *VALVE | HARDENED ST. STEEL |
| 5.1 | *O-RING | NBR |
| 5.2 | *VALVE HEAD | NBR |
| 5.3 | *VALVE HEAD | PTFE/GRAPHITE |
| 6 | *VALVE RETURN SPRING | AISI 302 / 1.4300 |
| 7 | *STRAINER SCREEN | AISI 304 / 1.4301 |
| 8 | PUSHROD | AISI 316 / 1.4401 |
| 9 | BOTTOM CAP | CF8M / 1.4408 |
| 10 | *CAP GASKET | ST. ST. / GRAPHITE |
| 11 | COVER BOLTS | STAINLESS STEEL |
| 12 | *GUIDE BUSH | AISI 316 / 1.4401 |
| 13 | *PLAIN BEARING | BRONZE FILLED PTFE |
| 14 | *BELLOWS | AISI 316 TI / 1.4571 |
| 15 | *BELLOWS GASKET | ST. ST. / GRAPHITE |
| 16 | *ADJUSTMENT SPRING | STEEL |
| 17 | TOP SPRING PLATE | BRASS |
| 18 | ADJUSTMENT SCREW | AISI 304 / 1.4301 |
| 18.1 | BEARING | STEEL |
| 18.2 | PIN | AISI 304 / 1.4301 |
| 19 | SPRING | AISI 302 / 1.4300 |
| 19.1 | STARLOCK WASHER | AISI 302 / 1.4300 |
| 20 | HANDWHEEL | PLASTIC |
| 21 | SPRING IDENT. PLATE | PLASTIC |



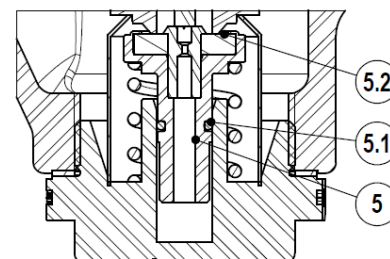
* Available spare parts.



PRV25I



PRV25IG



PRW25I



| STEAM CAPACITY TABLE (Kg/h) | | | | |
|--------------------------------|---------------|------------|------|------|
| INLET bar | OUTLET bar | SAT. STEAM | | |
| | | DN15 | DN20 | DN25 |
| 2 | 0,2 | 33 | 53 | 64 |
| | 1,2 | 57 | 87 | 104 |
| | 1,6 | 38 | 59 | 71 |
| 3 | 0,3 | 45 | 70 | 83 |
| | 1,2 | 76 | 116 | 138 |
| | 2,2 | 61 | 93 | 111 |
| | 2,6 | 46 | 70 | 83 |
| 4 | 0,4 | 56 | 87 | 104 |
| | 1 | 66 | 102 | 121 |
| | 2,5 | 95 | 145 | 173 |
| | 3,5 | 57 | 87 | 104 |
| 5 | 0,5 | 68 | 105 | 125 |
| | 2 | 91 | 139 | 166 |
| | 3 | 114 | 174 | 208 |
| | 4 | 85 | 130 | 155 |
| 6 | 0,6 | 79 | 122 | 145 |
| | 2 | 106 | 162 | 194 |
| | 3 | 133 | 203 | 243 |
| | 4 | 120 | 184 | 219 |
| 7 | 0,7 | 91 | 139 | 167 |
| | 2 | 121 | 185 | 222 |
| | 3,5 | 152 | 232 | 277 |
| | 5 | 132 | 201 | 240 |
| 8 | 0,8 | 102 | 157 | 187 |
| | 2 | 137 | 210 | 250 |
| | 3,5 | 171 | 262 | 312 |
| | 5 | 161 | 247 | 294 |
| | 6 | 142 | 217 | 259 |
| 9 | 0,9 | 114 | 174 | 208 |
| | 2,5 | 133 | 203 | 242 |
| | 4 | 152 | 233 | 277 |
| | 5 | 190 | 291 | 347 |
| 10 | 1 | 125 | 192 | 228 |
| | 3 | 146 | 224 | 266 |
| | 4 | 167 | 256 | 305 |
| | 6 | 209 | 320 | 381 |
| | 8 | 161 | 247 | 294 |
| 11 | 1,1 | 136 | 210 | 249 |
| | 3 | 182 | 280 | 333 |
| | 6 | 228 | 350 | 416 |
| | 8 | 198 | 302 | 360 |
| | 8,6 | 182 | 279 | 331 |
| 12 | 1,2 | 148 | 227 | 270 |
| | 3 | 197 | 302 | 360 |
| | 6 | 247 | 378 | 451 |
| | 8 | 228 | 349 | 416 |
| | 8,6 | 217 | 332 | 396 |
| 13 | 1,3 | 159 | 244 | 291 |
| | 4 | 186 | 284 | 340 |
| | 6 | 212 | 325 | 388 |
| | 7 | 266 | 407 | 486 |
| 15 | 8,6 | 246 | 378 | 451 |
| | 1,5 | 182 | 259 | 321 |
| | 4 | 212 | 302 | 374 |
| | 6 | 243 | 345 | 427 |
| | 8 | 304 | 433 | 536 |
| 17 | 8,6 | 298 | 426 | 512 |
| | 1,7 | 205 | 279 | 333 |
| | 4 | 238 | 325 | 386 |
| | 6 | 273 | 372 | 441 |
| | 8 | 342 | 465 | 555 |
| 8,6 | 339 | 449 | 541 | |

| COMPRESSED AIR CAPACITY TABLE (Nm3/h-0°C-1,013bar) | | | | |
|---|---------------|----------------|------|------|
| INLET bar | OUTLET bar | COMPRESSED AIR | | |
| | | DN15 | DN20 | DN25 |
| 2 | 0,2 | 45 | 72 | 86 |
| | 1,2 | 77 | 117 | 140 |
| | 1,6 | 51 | 80 | 96 |
| 3 | 0,3 | 61 | 95 | 112 |
| | 1,2 | 103 | 157 | 186 |
| | 2,2 | 82 | 126 | 150 |
| | 2,6 | 62 | 95 | 112 |
| 4 | 0,4 | 76 | 117 | 140 |
| | 1 | 89 | 138 | 163 |
| | 2,5 | 128 | 196 | 234 |
| | 3,5 | 77 | 117 | 140 |
| 5 | 0,5 | 92 | 142 | 169 |
| | 2 | 123 | 188 | 224 |
| | 3 | 154 | 235 | 281 |
| | 4 | 115 | 176 | 209 |
| 6 | 0,6 | 107 | 165 | 196 |
| | 2 | 143 | 219 | 262 |
| | 3 | 180 | 274 | 328 |
| | 4 | 162 | 248 | 296 |
| 7 | 0,7 | 123 | 188 | 225 |
| | 2 | 163 | 250 | 300 |
| | 3,5 | 205 | 313 | 374 |
| | 5 | 178 | 271 | 324 |
| 8 | 0,8 | 138 | 212 | 252 |
| | 2 | 185 | 284 | 338 |
| | 3,5 | 231 | 354 | 421 |
| | 5 | 217 | 333 | 397 |
| | 6 | 192 | 293 | 350 |
| | 0,9 | 154 | 235 | 281 |
| 9 | 2,5 | 180 | 274 | 327 |
| | 4 | 205 | 315 | 374 |
| | 5 | 257 | 393 | 468 |
| | 7 | 205 | 313 | 374 |
| | 1 | 169 | 259 | 308 |
| 10 | 3 | 197 | 302 | 359 |
| | 4 | 225 | 346 | 412 |
| | 6 | 282 | 432 | 514 |
| | 8 | 217 | 333 | 397 |
| | 1,1 | 184 | 284 | 336 |
| 11 | 3 | 246 | 378 | 450 |
| | 6 | 308 | 473 | 562 |
| | 8 | 267 | 408 | 486 |
| | 8,6 | 246 | 377 | 447 |
| | 1,2 | 200 | 306 | 365 |
| 12 | 3 | 266 | 408 | 486 |
| | 6 | 333 | 510 | 609 |
| | 8 | 308 | 471 | 562 |
| | 8,6 | 293 | 448 | 535 |
| | 1,3 | 215 | 329 | 393 |
| 13 | 4 | 251 | 383 | 459 |
| | 6 | 286 | 439 | 524 |
| | 7 | 359 | 549 | 656 |
| | 8,6 | 332 | 510 | 609 |
| | 1,5 | 246 | 350 | 433 |
| 15 | 4 | 286 | 408 | 505 |
| | 6 | 328 | 466 | 576 |
| | 8 | 410 | 585 | 724 |
| | 8,6 | 402 | 575 | 691 |
| | 1,7 | 277 | 377 | 450 |
| 17 | 4 | 321 | 439 | 521 |
| | 6 | 369 | 502 | 595 |
| | 8 | 462 | 628 | 749 |
| | 8,6 | 458 | 606 | 730 |

| WATER CAPACITY TABLE (m3/h) | | | |
|--------------------------------|-------|------|------|
| D.P. bar | WATER | | |
| | DN15 | DN20 | DN25 |
| 1,5 | 2,1 | 3,18 | 3,8 |
| 2 | 2,4 | 3,67 | 4,38 |
| 3 | 2,95 | 4,5 | 5,37 |
| 4 | 3,4 | 5,2 | 6,2 |
| 5 | 3,8 | 5,8 | 6,93 |
| 6 | 4,16 | 6,36 | 7,6 |
| 8 | 4,8 | 7,35 | 8,75 |
| 12 | 5,8 | 9 | 10,7 |

