

Naval Pressure Reducing Panels (PRP)

CAPABILITY SHEET · HP AIR 200 BAR · NAB / 70-30 CUNI · UNDER CONTRACT

THE PRODUCT

WHAT	Group-mounted pressure reducing panels for warship HP air: dome-loaded reducing valve with built-in relief, non-return balance stop valves, 20-micron strainer, bypass throttle, relief valve, and glycerine-filled gauges on one SS 316 plate - single inlet, single outlet, one duty per panel.
STATUS	Under contract - multiple ship sets (29 panels per set, eight duty ratings) for an Indian warship-building programme, delivering in stages with class-witnessed acceptance.
FORMAT	Bulkhead-mounted panels within a 450 x 400 mm envelope; loose isolation valves, ILMS spares, installation and setting-to-work support in scope.

REFERENCE CONFIGURATION

DUTIES	Eight ratings: 200-150, 200-100, 200-50, 200-45, 200-30, 200-8, 200-7, and 7-4 bar - outlet pressure and rated flow held constant as inlet decays from 200 to 120 bar.
FLOW	Duty-specific ratings up to 360 Nm ³ /h; inlet 12 mm OD, outlets 12-38 mm OD, BSP parallel threads to BS 21G.
MATERIALS	NAB valve bodies, 70/30 CuNi pipe, phosphor-bronze internals, Monel K400 springs, nitrile elastomers, SS 316 handwheels and gauges; silver brazing to BS 1845 Ag14; no bends by bending.
ENVIRONMENT	Shock grade A, vibration MIL-STD-167 Type I, noise MIL-STD-740-2; roll +/-30 deg, pitch +/-10 deg, list 20 deg, trim 5 deg, sea state 7 survival; design temperature 120 deg C.

TESTING & CERTIFICATION

EVERY PANEL	Hydrostatic 300 bar (20-30 min), seat tightness 300 bar / 20 min with zero leakage, bubble-tight to ANSI Class VI; FAT covers visual, hydro, relief lift, seal tightness, accuracy of regulation, and dynamic outlet pressure.
TYPE TESTS	ASTM F 1685 regime - pressure reversal, accuracy of regulation, pressurisation rate, shock, noise and vibration; 10,000-cycle endurance followed by hydrotest; 25-cycle regulation repeatability.
WITNESS	Acceptance witnessed by a classification society and the shipbuilder's inspection organisation; design to NES 314 / NES 375 / ANSI B16.34 / ASME B31.3.

SUPPORT & ENGAGEMENT

SUPPORT	48-month warranty; 30-year product support with 2-year obsolescence notice; ILMS-coded on-board, base and depot spares; 24-month tropical preservation; SS 316 tally plates.
VARIANTS	Other media (nitrogen and gas services), alternative duty pairings, high-flow ratings, and shore-side letdown stations engineered to order.
ENGAGEMENT	Send your tender specification to sales@neometrixgroup.com - clause-by-clause compliance matrix and budgetary quotation within two working days.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com

Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India

Reference configuration reflects panels under contract against an Indian warship-building tender. All parameters re-scoped against the customer's specification at proposal stage.