





































Specification:

- Designed & manufactured to DNV 2.7-1:2006 & EN 12079.
- · 16 cylinder frame Supplied hot dip galvanised.
- Supplied fully assembled & pressure tested.
- · Cylinders supplied with neck rings. Cylinders @ 50 Litres.
- Cylinder neck painted to your choice of colour to represent gas service.
- · Manifold supplied with BS341 no. 3 connections, EN13769 compliant
- Full certification pack supplied c/w pressure test certificate of conformity
- Frames supplied stenciled and fitted with DNV decal, DNV label and Tare / MGW / Payload sticker















| Cylinder | IL1.50.229.200 |
|---|---|
| Manufacturing Standard | ISO 9809-1 |
| Dimensions | 229mm OD x 1480 mm Length x 50.0 ltrs |
| Material | 34CrMo4 |
| Manufacturing Process | Hot Spinning of Seamless Steel Tubes |
| Heat Treatment | Hardened Quenched and Tempered |
| Working Pressure | 200 bar |
| Hydraulic Test Pressure | 300 bar |
| Minimum Burst Pressure | 480 bar |
| Volumetric Capacity (nominal) | 50 Litres |
| Nominal Gas Capacity | 10 cu.m (Approx) |
| Cylinder Outside Diameter (+_1%) | 229mm |
| Cylinder Length (without valve (+_20MM) | 1470mm (Approx) |
| Tare Weight (+_5%) | 54 kg (Approx) |
| Gas Application | Oxygen |
| Neck Thread Specification | 25E as per EN-629 |
| Valve | Hand wheel Operated Valve with BS3 Outlet |
| External Finish | Powder coated as per Gas Color Code for |
| | Oxygen Black (RAL 9005) with white neck |















DNV-GL

DESIGN VERIFICATION REPORT

DVR-262.1-032435-J-3 Rev.: 0

Particulars of Design

Designer / Client Synergy Bell (Division of Bell FluidTechnics Pvt. Ltd.) Manufacturer Synergy Bell (Division of Bell FluidTechnics Pvt. Ltd.)

DNV GL survey office Mumbai

Client project reference SYBL/19-20/053

DNV GL project number A0739915

This is to verify that the design of:

16 Cylinder Rack Frame

has been reviewed and found to comply with:

[1] DNV GL Standard DNVGL-ST-E271 "2.7-1 Offshore containers", August 2017.

[2] ISO 10855:2018 Offshore containers and associated lifting sets – Design, manufacture, testing, inspection and marking.

[3] IMO MSC / Circular 860.



















16 cylinder Quad DNV 2.7-1 Dimensions (L x W x H): 1.1 x 1.0 x 1.9 Weight (filled with nitrogen at 300 bar): 1,800 kg Volume (filled with nitrogen at 300 bar): 208 m3

King valves per quad: 2 x BS No. 3 (5/8 "BSP RH INT.) Each cylinder is equipped with individual valve.



48 cylinder Quad DNV 2.7-1 Dimensions (L x W x H): 1.8 x 2.1 x 1.8 Weight (filled with nitrogen at 300 bar): 5,090 kg Volume (filled with nitrogen at 300 bar): 623 m3

King valves per quad: 2 x BS No. 3 (5/8 "BSP RH INT.) Each cylinder is equipped with individual valve.



64 cylinder Quad DNV 2.7-1 Dimensions (L x W x H): 1.8 x 2.1 x 2.3 Weight (filled with nitrogen at 300 bar): 6,400 kg Volume (filled with nitrogen at 300 bar): 831 m³

King valves per quad: 2 x BS No. 3 (5/8 "BSP RH INT.) Each cylinder is equipped with individual valve.



Cylinder Lift Frame DNV 2.7-1 Dimensions (L x W x H): 1.2 x 1.15 x 2.2 Weight: 535 kg

ORDERING INFORMATION

| Sr. | Part Number | Description |
|-----|-------------|---|
| 1 | SY-DNVQ-16 | HIGH PRESSURE HOT DIP GALVANIZED DNV QUAD, 16 CYLINDER WITH |
| | | ISOLATION VALVE AND GAS MANAGEMENT PANEL WITH REGULATOR |
| 2 | SY-DNVQ-32 | HIGH PRESSURE HOT DIP GALVANIZED DNV QUAD, 32 CYLINDER WITH |
| | | ISOLATION VALVE AND GAS MANAGEMENT PANEL WITH REGULATOR |
| 3 | SY-DNVQ-64 | HIGH PRESSURE HOT DIP GALVANIZED DNV QUAD, 64 CYLINDER WITH |
| | | ISOLATION VALVE AND GAS MANAGEMENT PANEL WITH REGULATOR |













Contact us

29th Street, Amman Road, Behind Al Huraiz Est. For Industry, Al Qusais, Industrial Area - 1, Dubai, United Arab Emirates

: 009714 2580533

Fax: 042516664

UAE: 00971505648178

UK: 00447951966260

Website: www.synergyequipment.com

: ram@synergyequipment.com

For Sale: info@synergyequipment.com

