

GAPI

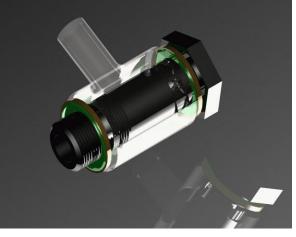


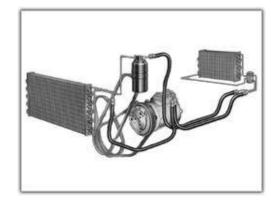


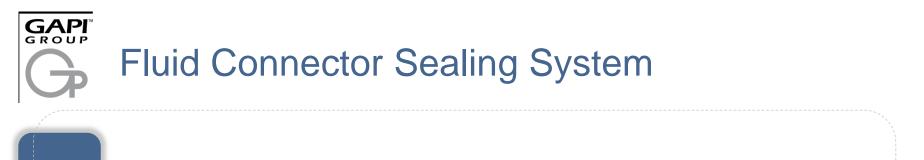
GROUP



Generic Connectors







Current Generic Sealing Systems

O Ring

Copper/ Aluminium Washers

Bonded Seals



Alternative Sealing Systems

ADVANTAGES

O RING

Low Unit Cost

COPPER / ALUMINUM WASHERS

Perceived Low Cost

DISADVANTAGES

Machining Hardware Difficult Assembly Control Not Reusable

Work Harden Low Pressure Only Warranty Confidence Thread Relaxation

BONDED SEAL

Industrial Standard Proven Technology Pre-assembly Perceived Increase In Cost



APPLICATIONS

POWER TRAIN

Sump Pan Seal Oil Pressure Sender Cam Cover Fasteners Oil Feeds Sensor Switches Blanking Plugs Turbo Oil Feed

COOLANT SYSTEM

Radiator Drain Plug Temperature Sensors Oil Coolers Fuel Coolers Turbo Water Feed

FUEL SYSTEM

Spill Back Rail Fuel Line Connections Fuel Tank Connector

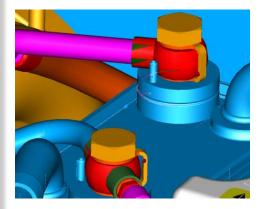
BRAKE SYSTEMS

Booster Unit/Master Cylinder Connections

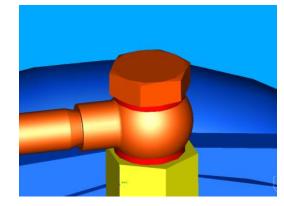
Fuel Cooler Connection

GROUP

Turbo Connection



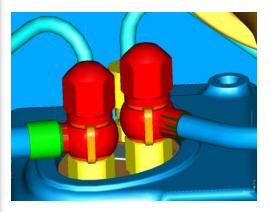
Fuel Line/ Filter Connection

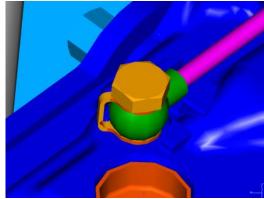


Cylinder Head Connection

Oil Return to Pump









Current Projects

Passenger

Jaguar General Motors FIAT / Maserati Mercedes Cars BMW Audi

Truck / Off Road

DAF (Paccar) Liebherr Mercedes Trucks Deutz Diesel

Application

Brake Connectors / HVAC/ Power Train Turbo Connections (additional platforms) HVAC Turbo / HVAC HVAC HVAC

Fuel Line / Power Train / HVAC Power Train Fuel Line / Power Train Power Train



MAJOR OEM CUSTOMERS AUTOMOTIVE SECTOR

Passenger Jaguar / Land Rover Fiat / Ford PSA Ferrari

GROUP

General Motors Chrysler USA Renault

Truck / Off Road

MAN Scania International Truck DAF (Paccar) Freight Liner (DTNA) lveco Volvo Liebherr

New Holland

AUTOMOTIVE TIER 1 & 2 CLIENTS UTILISING TECHNOLOGY

BEHR Bosch Bend All **Biebighauser Borg Warner** Calsonic Contitech Cosworth Delphi Denso Eaton Electricfil Filtrauto HALLA Haldex Honeywell Hutchinson Hycop Oetiker

GROUP

IMI Norgren KEUMAH-SCHMITTER Jiffy-Tite **Pro Vision** Nobel Mann Hummel SANDEN **SCHAEFFLER** Senior Automotive Siemens Teleflex **TI** Automotive TRW **T-ERRE** Wabco Visteon Valeo **ZF** Transmissions Usui Kokusai Sangyo Kaisha

ADVANTAGES OF SEALING SYSTEM

Seal For Life

Cost Effective Sealing Solution

Reusability

Pre Assembly

Low Torque Requirements

Seal Design Is Flexible To Suit Existing Components

Sealing Capability Against Rough Surface

DISADVANTAGES OF SEALING SYSTEM

Perception That It Is An Increased Cost

GROUP

TITLE REV. NO SCALE ROJECTION 3 : 1 0 WERKSTOFF = FLUOROCARBON V9L COMPOUND = 1.0330_St2,St12/DIN 1624 GRADE St2 SCHEIBE = WASHER = CS4 MILD STEEL TO BS1449 50 ¥ 4 2 40 ZINC / NICKEL (5 MICRONS MINIMUM) OBERFLACHE = (PLATING) COLOUR PASSIVATE "F" DIMENSION IS FOR BANJO BOLTS TO DIN Std. 7643 THREAD SIZE A -0.13 B +0.10 C +0.10 D :0.10 E -0.10 F _0.10 G :0.20 H -0.05 PRODUCT CODE SCRV9L3413-P18 14.00 10.40 9.80 8.30 7.00 0.70 0.20 M8 1.00 12.40 1.50 SCRV9L3414P18 16.00 11.80 10.30 9.00 0.90 0.20 M10 12.30 1.50 10.30 14.80 13.80 M12 SCRV9L3420-P18 18.00 0.90 0.20 SCRV9L3422-P18 22.00 15.80 14.30 1.50 12.30 0.90 0.20 16.80 M14 24.00 18.80 17.80 16.30 1.50 14.30 M16 SCRV9L3415-P18 0.90 0.20 18.30 1.50 26.00 20.80 19.80 16.30 0.90 0.20 SCRV9L3441-P18 M18 SCRV9L3456-P18 30.00 24.80 23.80 22.30 2.00 20.30 140 0.20 M22 ALL DIMENSIONS IN MM. UNLESS OTHERWISE STATED DRAWN DATE CHECKED DATE TITLE DRAWINE NO 26-02-10 C LEWIS 26-02-10 BANJO SEAL CHART JONES P1769

Din Range