



MATERIALS OF CONSTRUCTION GSL2, GSL2.5, GSL3

| MAIN PARTS 2'' - 2.5'' - 3'' | | |
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| PART NAME | STANDARD MATERIALS | OPTIONAL MATERIALS |
| Pump body, Heads By-pass valve cover Two-way outlet cover (not for 3'') | Carbon steel GS 52-3 | |
| Bearing covers | Aluminum | |
| Bearing | Deep groove ball bearing, grease lubricated, to 150°C (302°F) | Carbon bearing, to 1500C (3020F) |
| Rotor | Ductile iron GGG50 | Ductile iron GGG50 empty construction |
| Shaft | Single end keyed shaft steel 42CrMo4 | Double end keyed shaft steel 42CrMo4 Single end keyed shaft SS316 Double end keyed shaft SS316 |

| BY-PASS VALVE 2''- 2.5''- 3'' | | |
|--------------------------------------|---------------------------|---|
| PART NAME | STANDARD MATERIALS | OPTIONAL MATERIALS |
| Valve | Cast iron GGG50 | Stainless steel SS316 |
| Spring | Steel C80 DIN 17223 | Steel C80 DIN 17223 plated Stainless steel SS316 |

| VANES 2''- 2.5''- 3'' | | |
|------------------------------|---|---|
| PART NAME | STANDARD MATERIALS | OPTIONAL MATERIALS |
| Vanes | Advanced polymer with St37 plate to 130°C (266°F). 4250cSt(20000ssu) | Laminate VOLTIS® Hgw 2082 with St37 plate to 130°C (266°F). 4250cSt(20000ssu) PTFE (Teflon) with SS316 plate to 250°C (482°F). 4250cSt(20000ssu) |
| Push rods | Stainless steel SS304 | |

| SEALING 2" - 2.5" - 3" | | |
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| PART NAME | STANDARD MATERIALS | OPTIONAL MATERIALS |
| Mechanical seal | Type 502 Stationary Ring: silicon carbide Rotary Ring: silicon carbide Secondary seal: FKM (Viton) to 200°C (392°F) Spring & metal parts: SS304 | Type 59U Stationary Ring: silicon carbide Rotary Ring: carbon Secondary seal: PTFE (Teflon) to 250°C (482°F). Spring & metal parts: SS316 Cartridge type API682 Rotary Face: solid silicon carbide Stationary Face: graphite antimony impregnated solid Gaskets: FKM (Viton) Springs: Hastelloy C Other metal Parts: AISI 316 |
| O-ring | FKM (Viton) to 200°C (392°F) | FEP (Teflon) to 205°C (400°F) encapsulated FKM (Viton) |

| PIPING CONNECTION 2" - 2.5" - 3" | | |
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| PART NAME | STANDARD MATERIALS | OPTIONAL MATERIALS |
| Flange | Two weld flanges St37 | Two NPT flanges St37 Two BSPP DIN2986 couplings ANSI adaptors |