

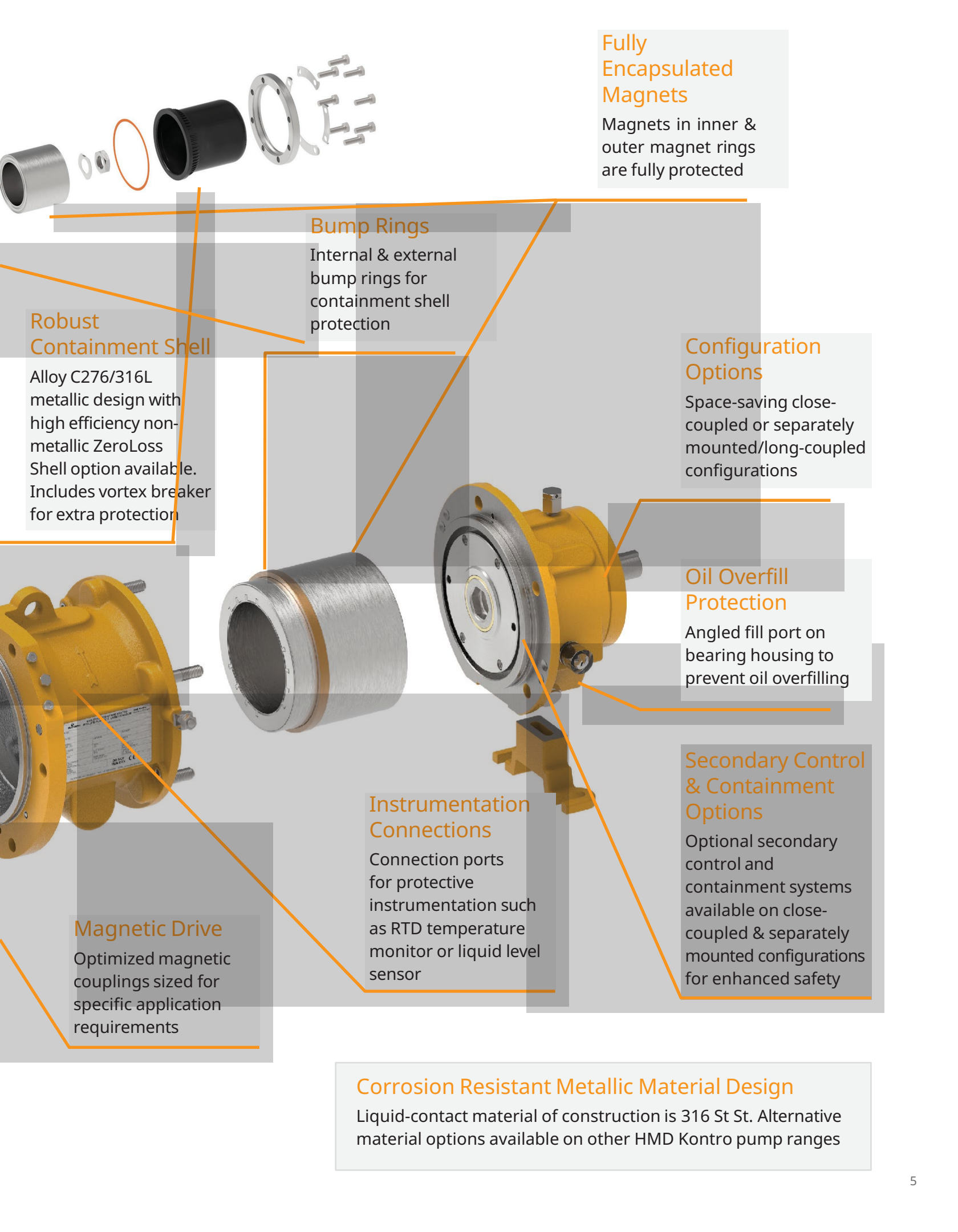
iflowparts

Remanufacturing for **life**

PART LIST

HMD Kontro Sealless Magnetic Drive Pumps





Fully Encapsulated Magnets

Magnets in inner & outer magnet rings are fully protected

Bump Rings

Internal & external bump rings for containment shell protection

Robust Containment Shell

Alloy C276/316L metallic design with high efficiency non-metallic ZeroLoss Shell option available. Includes vortex breaker for extra protection

Configuration Options

Space-saving close-coupled or separately mounted/long-coupled configurations

Oil Overfill Protection

Angled fill port on bearing housing to prevent oil overfilling

Secondary Control & Containment Options

Optional secondary control and containment systems available on close-coupled & separately mounted configurations for enhanced safety

Instrumentation Connections

Connection ports for protective instrumentation such as RTD temperature monitor or liquid level sensor

Magnetic Drive

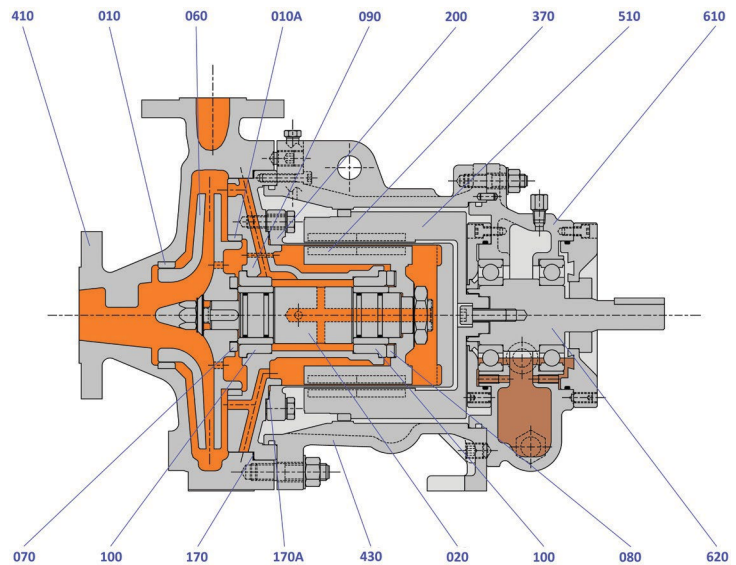
Optimized magnetic couplings sized for specific application requirements

Corrosion Resistant Metallic Material Design

Liquid-contact material of construction is 316 St St. Alternative material options available on other HMD Kontro pump ranges

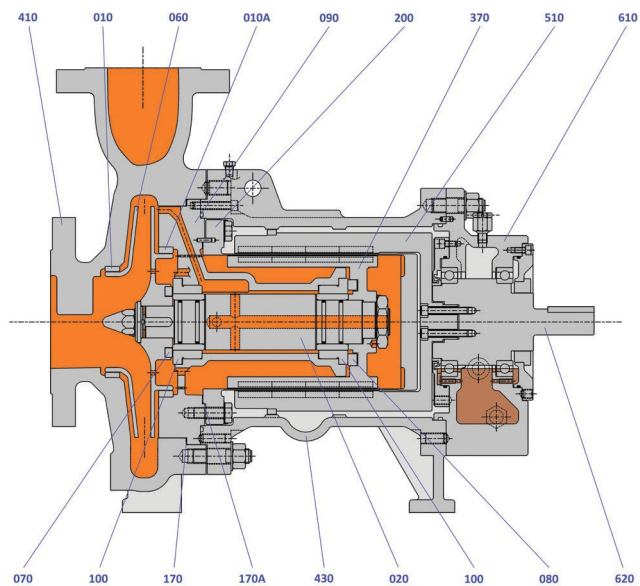
Construction of the CSA Frame 1 Pump Range

010	Neck Ring (Front)	316LStSt
010A	Neck Ring (Back)	316LStSt
020	Pump Shaft	316LStSt
060	Impeller	316LStSt
070	Front Thrust Washer	Silicon Carbide
080	Back Thrust Washer	Silicon Carbide
090	Bush Holder	316LStSt
100	Bush	Silicon Carbide
170	Casing Gasket	CSF
170A	Shell Gasket	CSF
200	Containment Shell	Alloy C / 316L
370	Inner Magnet Ring	316L St St Clad
410	Casing	316LStSt
430	Coupling Housing	SG Iron
510	Outer Magnet Ring	C. Steel (Sheathed)
610	Bearing Housing	SG Iron
620	Drive Shaft	Carbon Steel



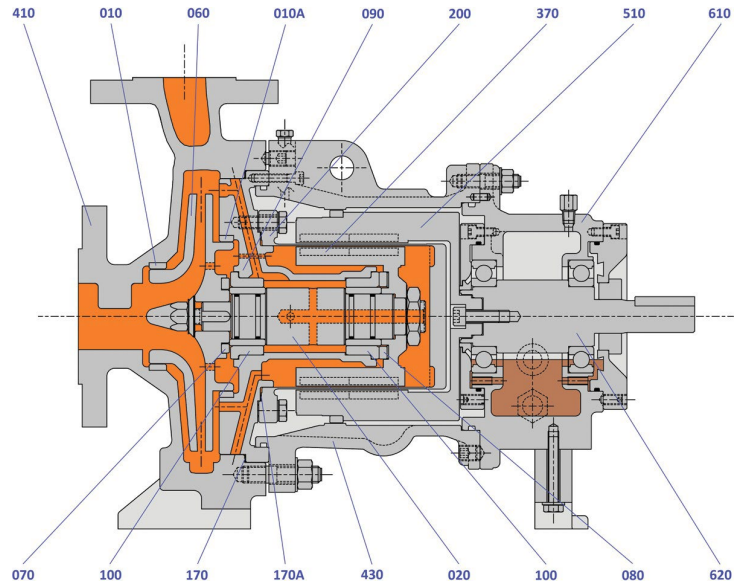
Construction of the CSA Frame 2 Pump Range

010	Neck Ring (Front)	316LStSt
010A	Neck Ring (Back)	316LStSt
020	Pump Shaft	316LStSt
060	Impeller	316LStSt
070	Front Thrust Washer	Silicon Carbide
080	Back Thrust Washer	Silicon Carbide
090	Bush Holder	316LStSt
100	Bush	Silicon Carbide
170	Casing Gasket	CSF
170A	Shell Gasket	CSF
200	Containment Shell	Alloy C / 316L
370	Inner Magnet Ring	316L St St Clad
410	Casing	316LStSt
430	Coupling Housing	SG Iron
510	Outer Magnet Ring	C. Steel (Sheathed)
610	Bearing Housing	SG Iron
620	Drive Shaft	Carbon Steel



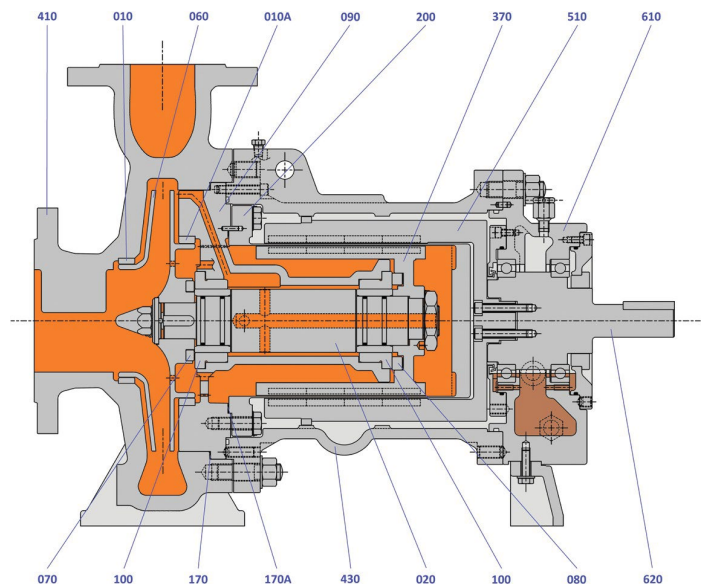
Construction of CSI Frame 1 Pump

010	Neck Ring (Front)	316LStSt
010A	Neck Ring (Back)	316LStSt
020	Pump Shaft	316LStSt
060	Impeller	316LStSt
070	Front Thrust Washer	Silicon Carbide
080	Back Thrust Washer	Silicon Carbide
090	Bush Holder	316LStSt
100	Bush	Silicon Carbide
170	Casing Gasket	CSF
170A	Shell Gasket	CSF
200	Containment Shell	Alloy C / 316L
370	Inner Magnet Ring	316L St St Clad
410	Casing	316LStSt
430	Coupling Housing	SG Iron
510	Outer Magnet Ring	C. Steel (Sheathed)
610	Bearing Housing	SG Iron
620	Drive Shaft	Carbon Steel



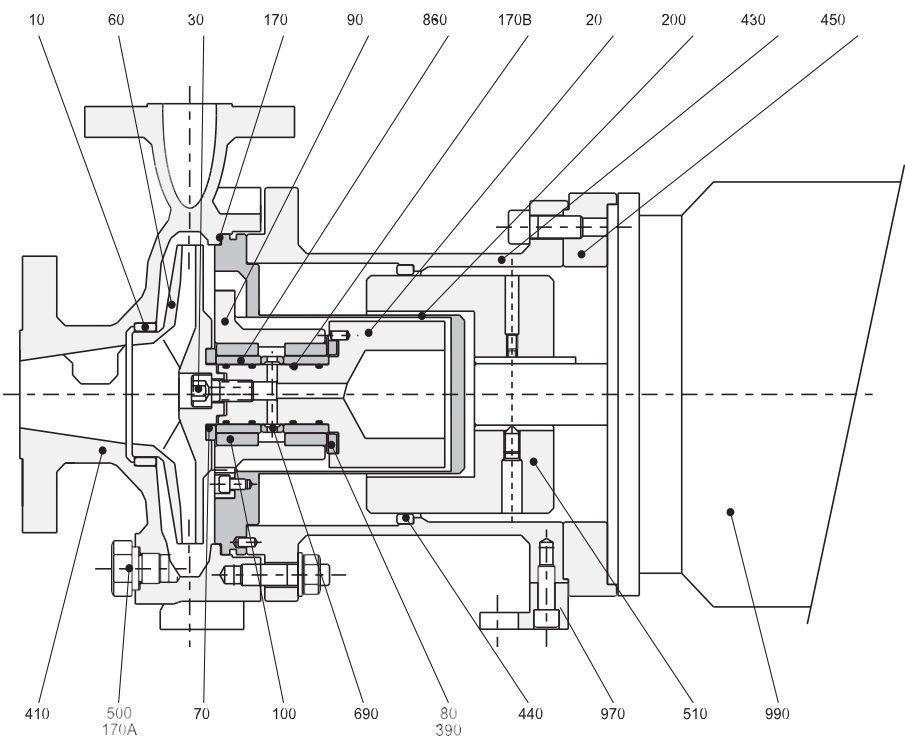
Construction of CSI Frame 2 Pump

010	Neck Ring (Front)	316LStSt
010A	Neck Ring (Back)	316LStSt
020	Pump Shaft	316LStSt
060	Impeller	316LStSt
070	Front Thrust Washer	Silicon Carbide
080	Back Thrust Washer	Silicon Carbide
090	Bush Holder	316LStSt
100	Bush	Silicon Carbide
170	Casing Gasket	CSF
170A	Shell Gasket	CSF
200	Containment Shell	Alloy C / 316L
370	Inner Magnet Ring	316L St St Clad
410	Casing	316LStSt
430	Coupling Housing	SG Iron
510	Outer Magnet Ring	C. Steel (Sheathed)
610	Bearing Housing	SG Iron
620	Drive Shaft	Carbon Steel

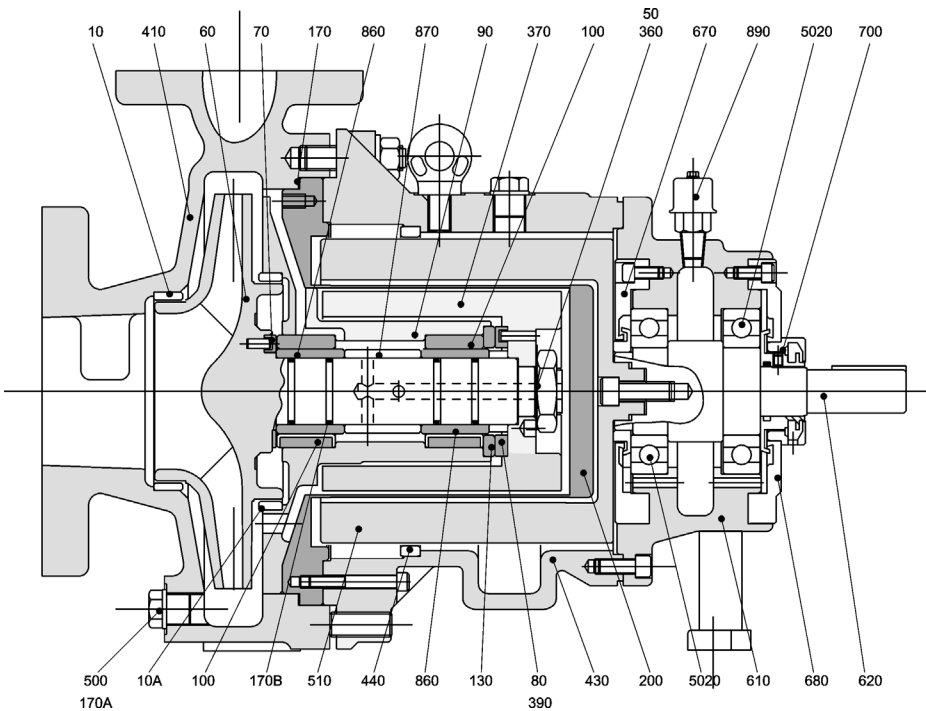


Construction of GSA/GSI frame 0

10	Front Neck Ring	Stainless Steel
20	Pump Shaft/IMR	Stainless Steel
30	Impeller Fixing	Stainless Steel
60	Impeller	Stainless Steel
70	Front Thrust Washer	Alpha SiC
80	Back Thrust Washer	Alpha SiC
90	Bush Holder	Stainless Steel
100	Bush	Alpha SiC
170	Gasket (Casing)	CSF/ PTFE
170A	Gasket (Drain)C	CSF/ PTFE
170B	O' Ring	VitonA/ PFR
200	Containment Shroud/Shell	Stainless Steel/C276
390	Support Gasket	Exfoliated Graphite & SS
410	Casing	Stainless Steel
430	Coupling Housing	SG Iron
440	Bump Ring	Phosphor Bronze
450	Motor Adaptor	Carbon Steel
500	Drain Plug	Stainless Steel
510	Outer Magnet Ring	Carbon Steel
690	Shaft Sleeve Spacer	Stainless Steel
860	Shaft Sleeve	Alpha SiC
970	Coupling Housing Foot	SG Iron
990	Electric Motor	Proprietary

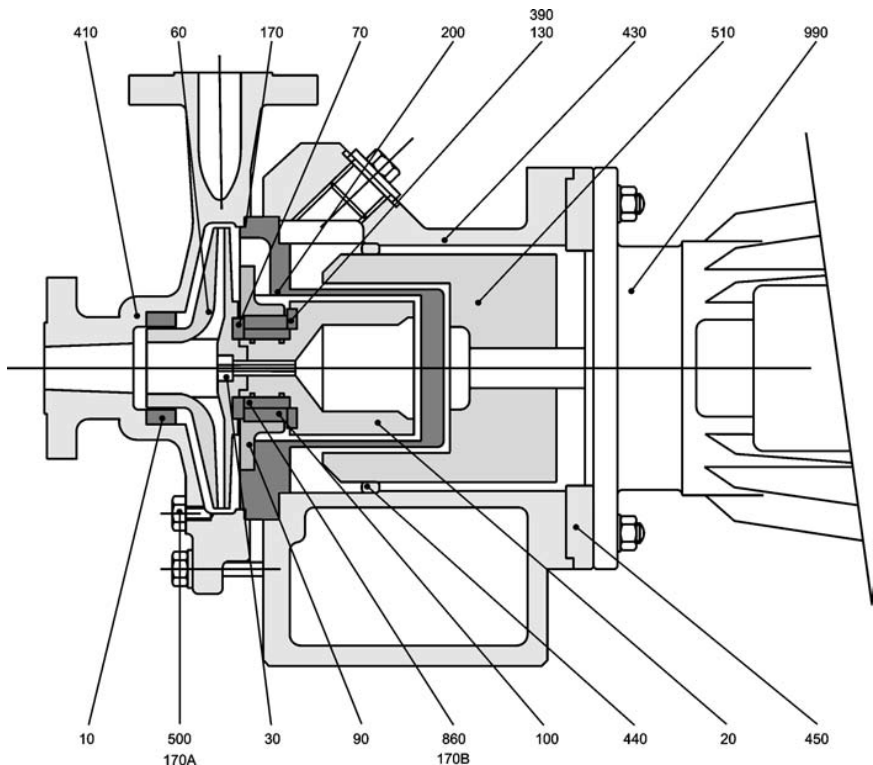


Construction of GSA/GSI frame I pumps



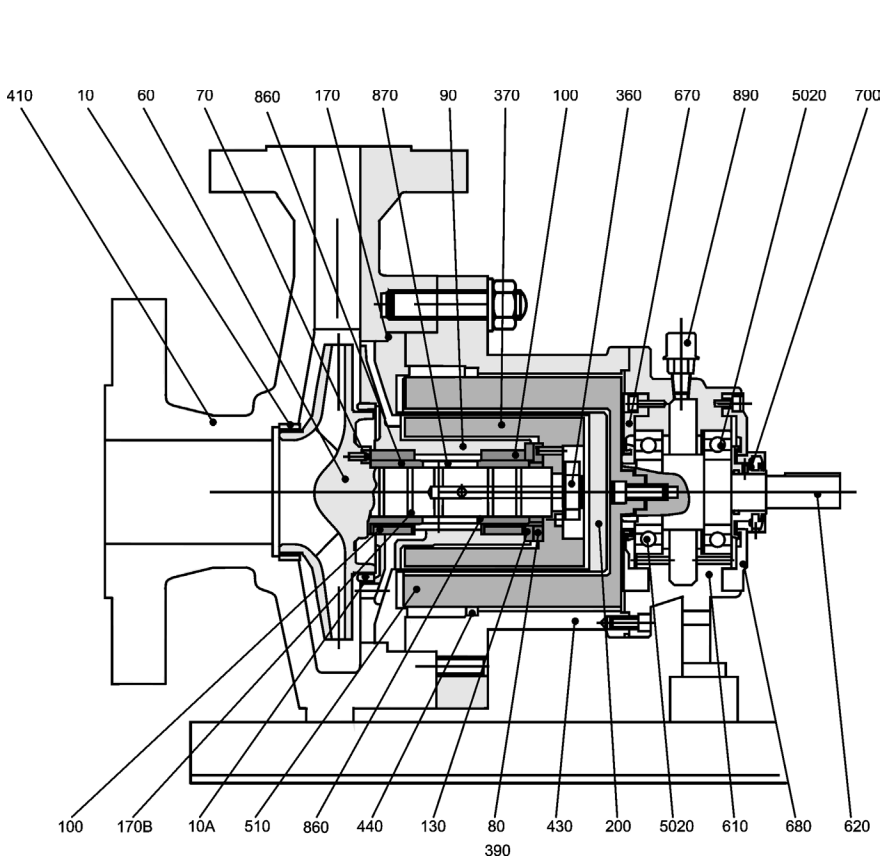
10	Neck Ring [Front]	Stainless Steel
10A	Neck Ring [Back]	Stainless Steel
50	Coupling Washer	Stainless Steel
60	Impeller	Stainless Steel
70	Front Thrust Washer	Alpha SiC
80	Back Thrust Washer	Alpha SiC
90	Bush Holder	Stainless Steel
100	Bush	Alpha SiC
130	Thrust Pad	Alpha SiC
170	Gasket [Casing]	CSF / PTFE
170A	Gasket [Drain]	CSF / PTFE
170B	O' Ring	Viton A / PFR
200	Containment Shroud/Shell	Alloy C & SS
360	Coupling Nut	Stainless Steel
370	Inner Magnet Ring	Stainless Steel
390	Support Gasket	Exfoliated Graphite & SS
410	Casing	Stainless Steel
430	Coupling Housing	SG Iron
440	Bump Ring	Phosphor Bronze
500	Drain Plug	Stainless Steel
510	Outer Magnet Ring	Carbon Steel
610	Bearing Housing	SG Iron
620	Drive Shaft	Carbon Steel
670	Front Cap	Carbon Steel
680	Back Cap	Carbon Steel
700	Labyrinth Seal [Kit]	Brass
870	Shaft Sleeve Spacer	Stainless Steel
860	Shaft Sleeve	Alpha SiC
890	Breather	Stainless Steel
5020	Race	Steel
****	Fixings [Kit]	Various

Construction of GT Pumps



10	Neck Ring [Front]	316 Stainless Steel
20	Shaft / Inner Magnet Ring	316 Stainless Steel
30	Impeller Fixing	316 Stainless Steel
60	Impeller	316 Stainless Steel
70	Front Thrust Washer	Alpha SiC
90	Bush Holder	316 Stainless Steel
100	Bush	Alpha SiC
130	Thrust Pad	Alpha SiC
170	Casing Gasket	CSF
170A	Drain Gasket [Optional]	CSF
170B	'O' Ring	Viton A
200	Containment Shroud/Shell	316L Stainless Steel
390	Support Gasket	Exfol. Graphite
410	Casing	316 Stainless Steel
430	Coupling Housing	SG Iron
440	Coupling Hsg. Bump Ring	Phos. Bronze
450	Motor Adaptor	Carbon Steel
500	Pump Drain [Optional]	316 Stainless Steel
510	Outer Magnet Ring	Carbon Steel
860	Bearing Sleeve	Alpha SiC
990	Bearing Sleeve	Alpha SiC
***	Electric Motor	Proprietary
	Fixings Kit	

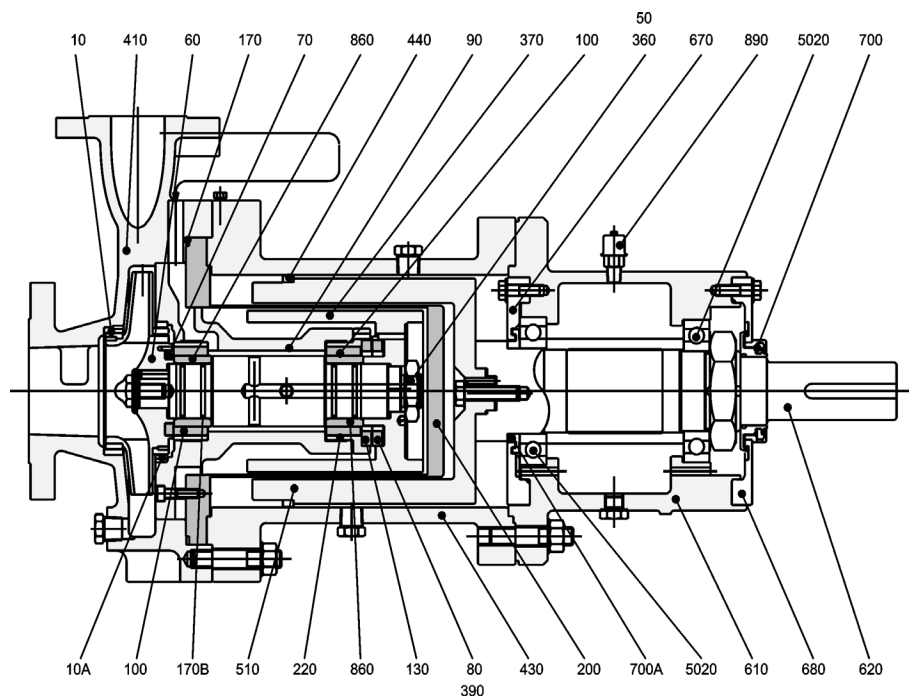
Construction of HPGS range



10	Neck Ring (Front)	Stainless Steel
10A	Neck Ring (Back)	Stainless Steel
50	Coupling Washer	Stainless Steel
60	Impeller	Stainless Steel
70	Front Thrust Washer	Alpha SiC
80	Back Thrust Washer	Alpha SiC
90	Bush Holder (150°C/300°F)	Stainless Steel
100	Bush	Alpha SiC
130	Thrust Pad	Alpha SiC
170	Casing Gasket	SS / Graphite
170B	'O' Ring	Viton A
200	Containment Shroud/Shell	SS / Alloy 625
360	Coupling Nut	Stainless Steel
370	Inner Magnet Ring	Stainless Steel
390	Support Gasket	Graphite & Nickel
410	Casing	Stainless Steel
430	Coupling Housing	SG Iron
440	Bump Ring	Phosphor Bronze
510	Outer Magnet Ring	Carbon Steel
610	Bearing Housing	SG Iron
620	Drive Shaft	Carbon Steel
670	Front Cap	Carbon Steel
680	Back Cap	Carbon Steel
700	Labyrinth Seal (Kit)	Brass
860	Shaft Sleeve	Alpha SiC8
890	Shaft Sleeve Spacer	Stainless Steel
5020	Breather	Stainless Steel
	Race	Steel

Seperate mounted model shown

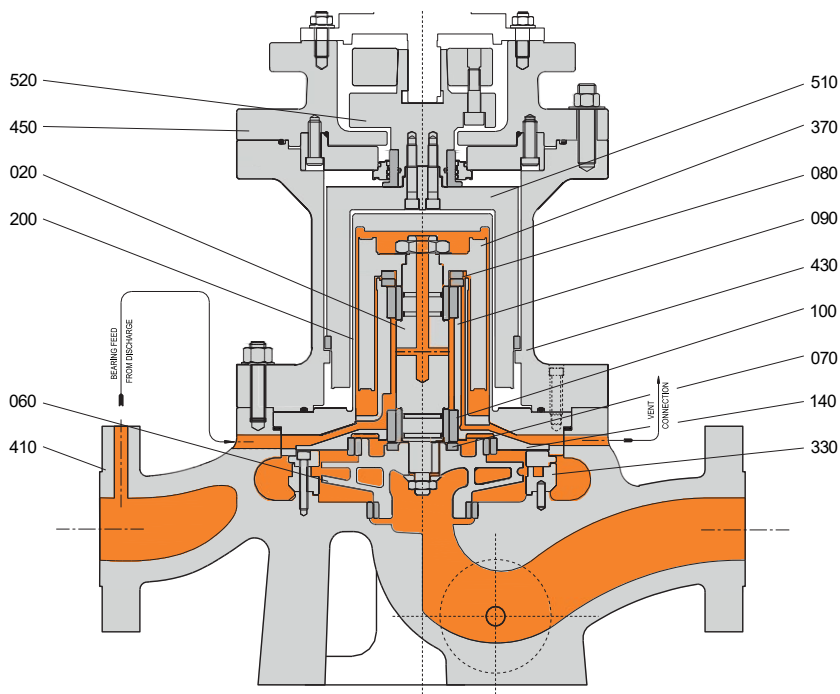
Construction of GSP frames I & II



10	Neck Ring [Front]	Stainless Steel
10A	Neck Ring [Back]	Stainless Steel
50	Coupling Washer	Stainless Steel
60	Impeller	Stainless Steel
70	Front Thrust Washer	Alpha SiC
80	Back Thrust Washer	Alpha SiC
90	Bush Holder	Stainless Steel
100	Bush	Alpha SiC
130	Thrust Pad	Alpha SiC
170	Casing Gasket	CSF
170B	O' Ring	Viton A
200	Containment Shroud	Alloy C & SS
220	Rear Bush Housing	Stainless Steel
360	Coupling Nut	Stainless Steel
370	Inner Magnet Ring	Exfoliated Graphite & SS
390	Support Gasket	Stainless Steel
410	Casing	Carbon Steel
430	Coupling Housing	Phosphor Bronze
440	Bump Ring	Carbon Steel
510	Outer Magnet Ring	Carbon Steel
610	Bearing Housing	Carbon Steel
620	Drive Shaft	Carbon Steel
670	Front Cap	Carbon Steel
680	Back Cap	Brass
700	Labyrinth Seal [Kit]	Proprietary
700A	Sec. Containment Seal	Alpha SiC
860	Shaft Sleeve	Alpha SiC
890	Breather	Stainless Steel
5020	Race	Steel
****	Fixings [Kit]	Various

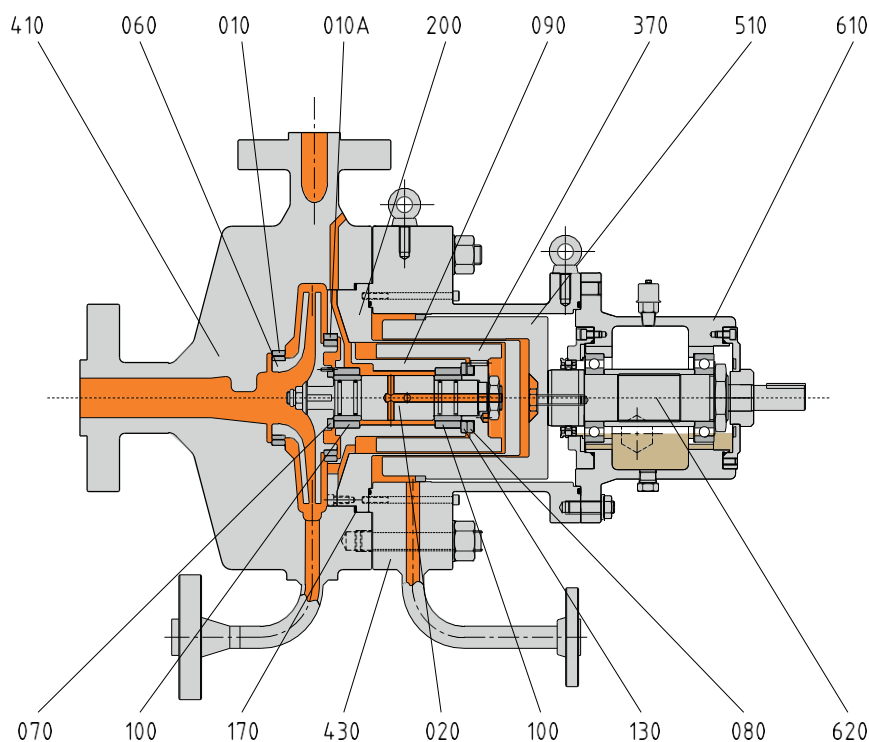
Construction of GSPV pump

Illustration shows a Frame 1 pump (20E 2x2x6)



020	Pump Shaft
060	Impeller
070	Thrust Washer (Front)
080	Thrust Washer (Back) / Alignment Pad
090	Bush Holder Assembly
100	Bush
140	Casing Plate
200	Containment Shell Assembly
330	Diffuser
370	Inner Magnet Ring
410	Casing Assembly
430	Coupling Housing Assembly
450	Motor Adaptor
510	Outer Magnet Ring
520	Drive Flange Adaptor

Construction of HPGSP pump



010	Neck Ring (Front)
010A	Neck Ring (Back)
020	Pump Shaft
060	Impeller
070	Thrust Washer (Front)
080	Thrust Washer (Back) / Alignment Pad
090	Bush Holder Assembly
100	Bush
130	Thrust Pad
170	Casing Gasket
200	Containment Shell Assembly
370	Inner Magnet Ring
410	Casing Assembly
430	Coupling Housing Assembly
510	Outer Magnet Ring
610	Bearing Housing
620	Drive Shaft

Flanges and Connections

Casing

Suction and discharge flanges are designed in accordance with the following relevant standards:

ANSI B16.5 Class 600	Machined with 7mm (1/4") high raised face having a continuous spiral groove
ANSI B16.5 Class 900	Machined with 7mm (1/4") high raised face having a continuous spiral groove
ANSI B16.5 Class 1500	Machined with 7mm (1/4") high raised face having a continuous spiral groove

Flange Loadings

Allowable flange loadings imposed by pipework are in accordance with Table 4 of API 685 2nd edition.

Drain Connections

The following drain options are available:

Frame 1 - 1/2" Pipe with Weld Neck Flange, gusseted in two planes.

Frame 2 - 3/4" Pipe with Weld Neck Flange, gusseted in two planes.

Vent Connections

Not required.

Gauge Connections

No provision for gauge connections has been made on this range of pumps.