



Outline Changes — GHPD/TSR to SRU

Alfa Laval has recently improved its pump range by adding a “Universal gearbox” to models size 1 to 4.

This universal gearbox allows our customers more flexibility to orient the ports of our pumps in the direction that best suits their process. In conjunction with this change we also renamed our pumps to the SRU. In order to accommodate this design change some small dimensional changes did occur and are outlined below. Except for the model 822/P there has not been any physical change to the product contact components.

The SRU pump range introduced in 2001 replaced the TSR and GHPD (Ring Feder) derivative pump ranges.

- The SRU pump with the HyClean Seal option replaces the GHPD (Ring Feder) and the SRU with R90 seal option replaces the TSR. This change primarily affects the gear box design only. The pump head components are identical when ordering an SRU model with the exception of models TSR6 NLS/D and GHPD 822/P.

Differences:

- SRU range in series 1-4 has a universal gearbox design, providing the flexibility of mounting pumps with the inlet and outlet ports in either a vertical or horizontal plane by changing the foot and foot position.
- Displacement of model TSR6/NLS/D and GHPD 822 have been extended from 2.46 liters/rev to 2.60 liters/rev to allow use of BS4825/ISO2037 compliant sanitary ports. Nomenclature updated to model SRU6/260 to reflect this change.
- SRU range NPSHr curves include viscosity corrected data.
- SRU range component spares are interchangeable with equivalent TSR/GHPD range except:
 - Gearcase
 - Gearcase Cover
 - Gearcase Foot**with the exception of model SR6/246 and GHPD 822/P pump head components.*
- Only minor modifications to pump baseplates and pipe work are necessary when replacing TSR/GHPD pumps with the equivalent SRU pumps.
- For replacement of horizontally ported TSR3 and 4 pumps; and GHPD 500 and 600 series, re-drilling of the pump baseplate will be necessary.
- For replacement of vertically ported TSR1, 3 and 5 pumps; and GHPD 300, 500, 700 pumps, re-drilling of the pump baseplate will be necessary.
- Tables showing dimensional changes are shown on the following pages. All other dimensions not shown are same for both the TSR/GHPD and SRU pumps.

Alfa Laval SRU Model	Alfa Laval SRU Description	Tri-Clover	G&H Model	Displacement Liters/rev	Max Pressure Bar
		TSR1NSS		0.053	8
		TSR1NSD		0.053	15
SRU1/005/HD	SRU 1NLD	TSR1NLD	GHPD-322	0.053	8
SRU1/005/LD	SRU 1NLD	TSR1NLD	GHPD-322V	0.053	8
		TSR1WSS		0.085	5
		TSR1WSD		0.085	12
SRU1/008/HD	SRU 1WLD	TSR1WLD	GHPD-332	0.085	5
SRU1/008/LD	SRU 1WLD	TSR1WLD	GHPD-332V	0.085	5
		TSR2NSS		0.128	10
		TSR2NSD		0.128	15
SRU2/013/HS	SRU 2NLS	TSR2NLS	GHPD-422	0.128	10
SRU2/013/HD	SRU 2NLD	TSR2NLD	GHPD-422P	0.128	15
SRU2/013/LS	SRU 2NLS	TSR2NLS	GHPD-422V	0.128	10
SRU2/013/LD	SRU 2NLD	TSR2NLD	GHPD-422V/P	0.128	15
		TSR2WSS		0.181	7
		TSR2WSD		0.181	12
SRU2/018/HS	SRU 2WLS	TSR2WLS	GHPD-432	0.181	7
SRU2/018/HD	SRU 2WLD	TSR2WLD	GHPD-432P	0.181	10
SRU2/018/LS	SRU 2WLS	TSR2WLS	GHPD-432V	0.181	7
SRU2/018/LD	SRU 2 WLD	TSR2WLD	GHPD-432V/P	0.181	10
		TSR3NSS		0.266	10
		TSR3NSD		0.266	20
SRU3/027/HS	SRU 3NLS	TSR3NLS	GHPD-522	0.266	10
SRU3/027/HD	SRU 3NLD	TSR3NLD	GHPD-522P	0.266	15
SRU3/027/LS	SRU 3NLS	TSR3NLS	GHPD-522V	0.266	10
SRU3/027/LD	SRU 3NLD	TSR3NLD	GHPD-522V/P	0.266	15
		TSR3WSS		0.384	7
		TSR3WSD		0.384	15
SRU3/038/HS	SRU 3WLS	TSR3WLS	GHPD-532	0.384	7
SRU3/038/HD	SRU 3WLD	TSR3WLD	GHPD-532P	0.384	10
SRU3/038/LS	SRU 3WLS	TSR3WLS	GHPD-532V	0.384	7
SRU3/038/LD	SRU 3WLD	TSR3WLD	GHPD-532V/P	0.384	10
SRU4/055/HS	SRU 4NLS	TSR4NLS	GHPD-622	0.554	10
SRU4/055/HD	SRU 4NLD	TSR4NLD	GHPD-622P	0.554	20
SRU4/055/LS	SRU 4NLS	TSR4NLS	GHPD-622V	0.554	10
SRU4/055/LD	SRU 4NLD	TSR4NLD	GHPD-622V/P	0.554	20
SRU4/079/HS	SRU 4WLS	TSR4WLS	GHPD-632	0.79	7
SRU4/079/HD	SRU 4WLD	TSR4WLD	GHPD-632P	0.79	15
SRU4/079/LS	SRU 4WLS	TSR4WLS	GHPD-632V	0.79	7
SRU4/079/LD	SRU 4WLD	TSR4WLD	GHPD-632V/P	0.79	15
SRU5/116/HS	SRU 5NLS	TSR5NLS	GHPD-722	1.16	10
SRU5/116/HD	SRU 5NLD	TSR5NLD	GHPD-722P	1.16	20
SRU5/116/LS	SRU 5NLS	TSR5NLS	GHPD-722V	1.16	10
SRU5/116/LD	SRU 5NLD	TSR5NLD	GHPD-722V/P	1.16	20
SRU5/168/HS	SRU 5WLS	TSR5WLS	GHPD-732	1.68	7
SRU5/168/HD	SRU 5WLD	TSR5WLD	GHPD-732P	1.68	15
SRU5/168/LS	SRU 5WLS	TSR5WLS	GHPD-732V	1.68	7
SRU5/168/LD	SRU 5WLD	TSR5WLD	GHPD-732V/P	1.68	15
		TSR6NLS	GHPD-822V	2.46	10
		TSR6NLD	GHPD-822P	2.46	20
SRU6/260/LS	SRU 6NLS			2.60	10
SRU6/260/LD	SRU 6NLD			2.60	20
SRU6/353/HS	SRU 6WLS	TSR6WLS	GHPD-832	3.53	7
SRU6/353/HD	SRU 6WLD	TSR6WLD	GHPD-832P	3.53	15
SRU6/353/LS	SRU 6WLS	TSR6WLS	GHPD-832V	3.53	7
SRU6/353/LD	SRU 6WLD	TSR6WLD	GHPD-832V/P	3.53	15



SRU Pump Nomenclature and previous derivatives

Dimension 'A' referring to port diameter of TSR/GHPD pump is same as dimension 'A^{enlarged}' for equivalent SRU pump. New dimension 'A^{sanitary}' now available for SRU pump.

Horizontally ported pump

(See drawing on page 5)

SRU pump dimensions in mm

PUMP Model	Pump Description	A Enlarged	C	D	E	G	L	M	N	Q	R
SRU1/005/L	SRU 1NLS/D	--	90.5	189				42		10	100
SRU1/008/L	SRU 1WLS/D	40	90.5	189				48		10	100
SRU2/013/L	SRU 2NLS/D	40		233	15		339	60			132
SRU2/018/L	SRU 2WLS/D	50		233	15		348	63			132
SRU3/027/L	SRU 3NLS/D	50	137.5	273		61	437		176		181
SRU3/038/L	SRU 3WLS/D	65	137.5	273		61	450	87	176		181
SRU4/055/L	SRU 4NLS/D	65		325					224		202
SRU4/079/L	SRU 4WLS/D	80		325					224		202
SRU5/116/L	SRU 5NLS/D	80		376			627				
SRU5/168/L	SRU 5WLS/D	100		376			650				
SRU6/260/L	SRU 6NLS/D	100		429			748	124.5		40	
SRU6/353/L	SRU 6WLS/D	150		429						40	

TSR/GHPD pump dimensions in mm.

TSR	GHPD	A	C	D	E	G	L	M	N	Q
1/NLS/D	322/P	25	90	168				44		15
1/WLS/D	332/P	40	90	168				48.5		15
2/NLS/D	422	40		212	16		340	60.5		
2/WLS/D	432	50		212	16		349	63.5		
3/NLS/D	522	50	138	253		60	438		175	
3/WLS/D	532	65	138	253		60	451	82.5	175	
3/NLS/D	622	65		303					225	
3/WLS/D	632	80		303					225	
4/NLS/D	722	80		367			628			
4/WLS/D	732	100		367			651			
4/WLS/D	822	100		425			743	125		35
6/WLD/D	832	150		425						35

Dimension 'A' referring to port diameter of TSR/GHPD pump is same as dimension 'A^{enlarged}' for equivalent SRU pump. New dimension 'A^{sanitary}' now available for SRU pump.

Vertically ported pump (See drawing on page 6)

SRU pump dimensions in mm.

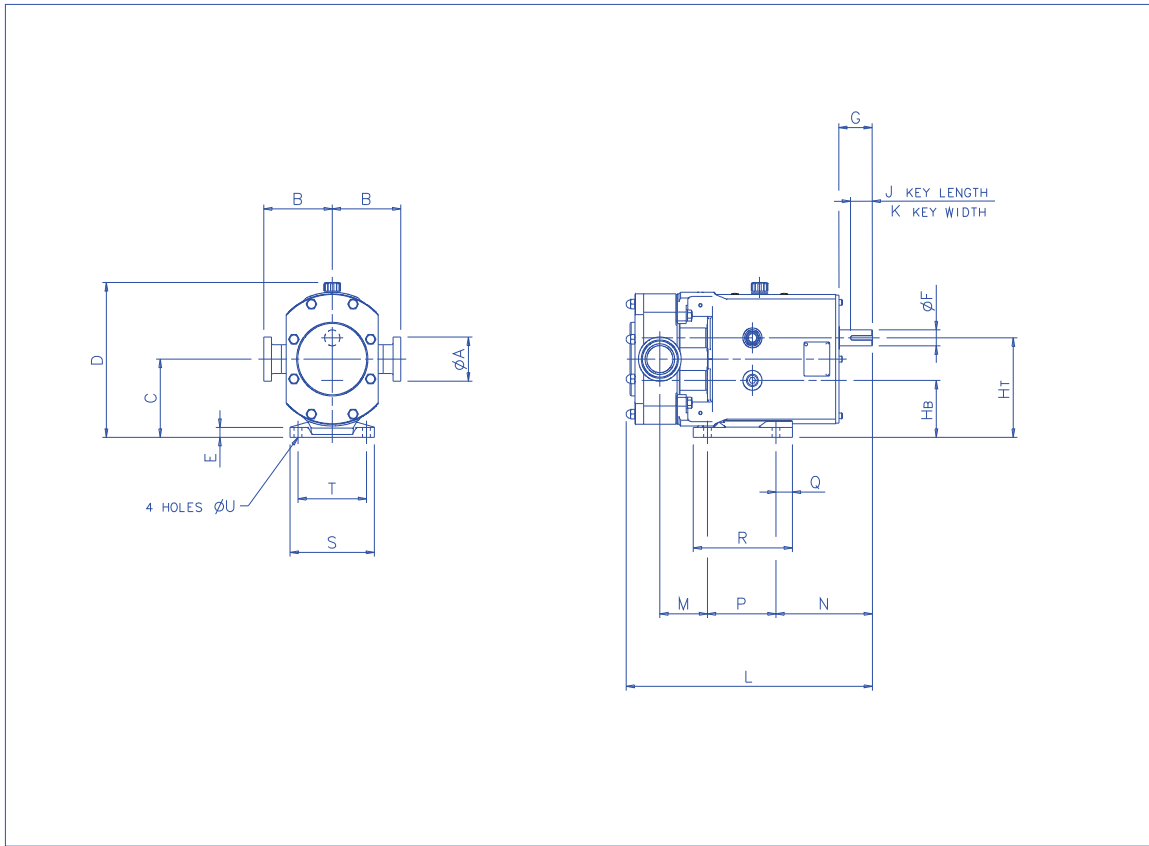
Pump Model	Pump Description	A ^{enlarged}	C	D	E	G	L	M	N	Q	R	S	U
SRU1/005/H	SRU 1NLS/D	-			15	40	285	49	117	22	114		
SRU1/008/H	SRU 1WLS/D	40			15	40	295		117	22	114		
SRU2/013/H	SRU 2NLS/D	40	147	252	15		339						
SRU2/018/H	SRU 2WLS/D	50	147	252	15		348	70					
SRU3/027/H	SRU 3NLS/D	50				61	437	67.5	161			155	14
SRU3/038/H	SRU 3WLS/D	65				61	450		161			155	14
SRU4/055/H	SRU 4NLS/D	65		363			541						
SRU4/079/H	SRU 4WLS/D	80		363			558	87					
SRU5/116/H	SRU 5NLS/D	80	256.5	431.5				91.5	264				
SRU5/168/H	SRU 5WLS/D	100	256.5	431.5			650		264				
SRU6/260/H	SRU 6NLS/D	100					748	124					
SRU6/353/H	SRU 6WLS/D	150					777						

TSR/GHPD pump dimensions in mm.

TSR	GHPD	A	C	D	E	G	L	M	N	Q	R	S	U
1/NLS/D	322/P	25			16	39	281	50	116	12	104		
1/WLS/D	332/P	40			16	39	290		116	12	104		
2/NLS/D	422	40	146.5	251.5	20		343						
2/WLS/D	432	50	146.5	251.5	20		353	71					
3/NLS/D	522	50				58	439	68	153			154	12
3/WLS/D	532	65				58	449		153			154	12
3/NLS/D	622	65		371			540						
3/WLS/D	632	80		371			557	86					
4/NLS/D	722	80	257	432				92	263				
4/WLS/D	732	100	257	432			660		263				
4/WLS/D	822	100					739	120					
6/WLD/D	832	150					773						



Horizontally ported pump



Vertically ported pump

