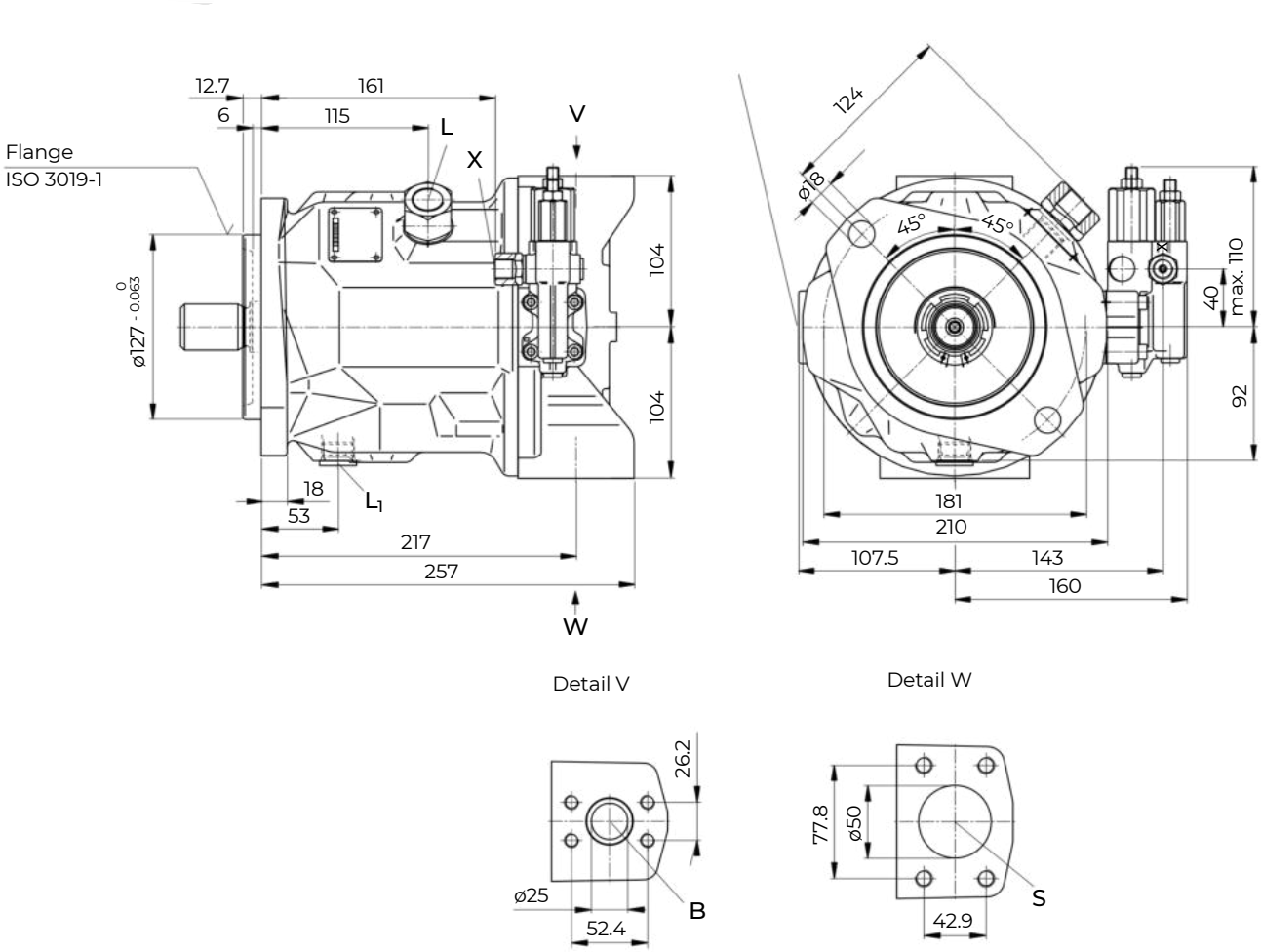
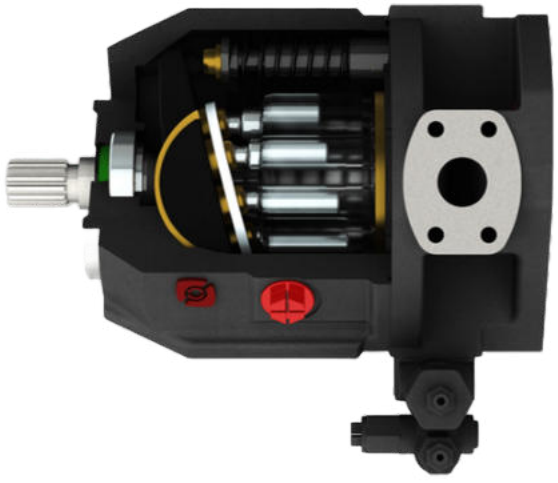
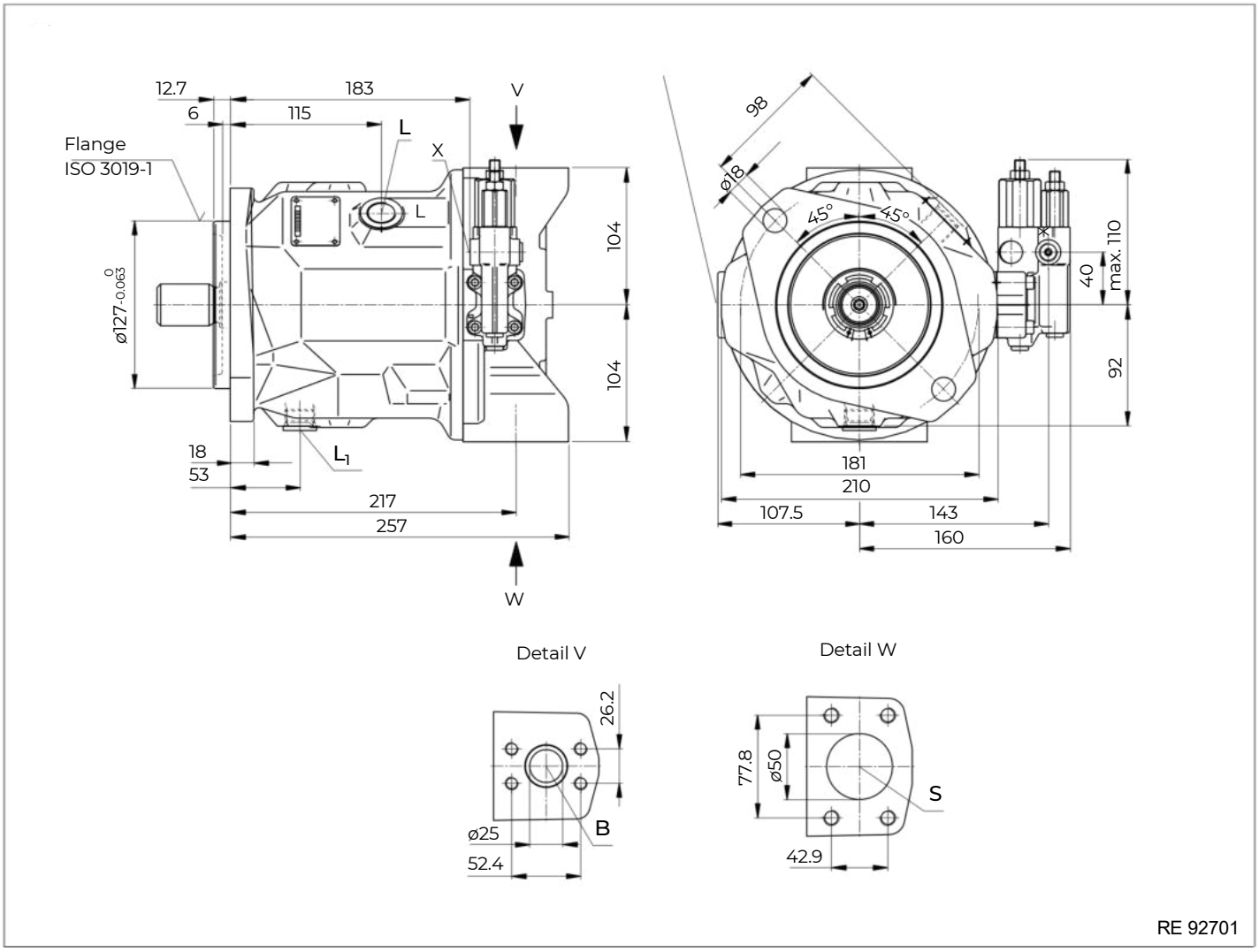
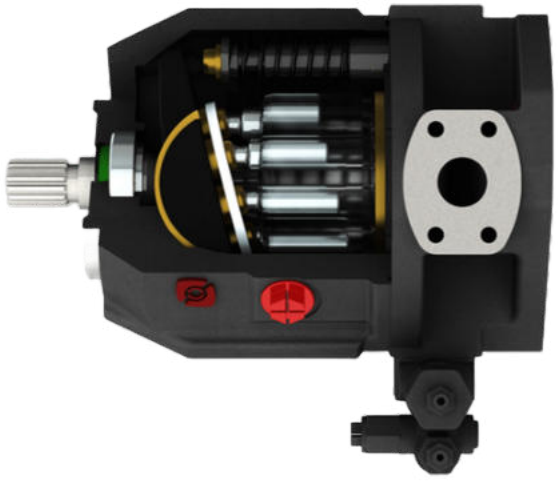
LS-X/ LS-C – Pressure and flow control, hydraulic; clockwise rotation, version: Ports metric





LS-X/ LS-C – Pressure and flow control, hydraulic; clockwise rotation, version: SAE ports



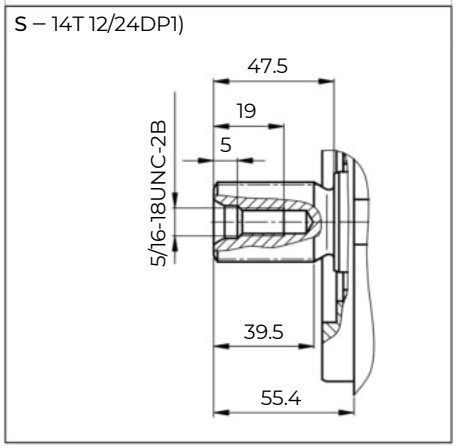


Dimensions Size;

HA10VO31-71cc

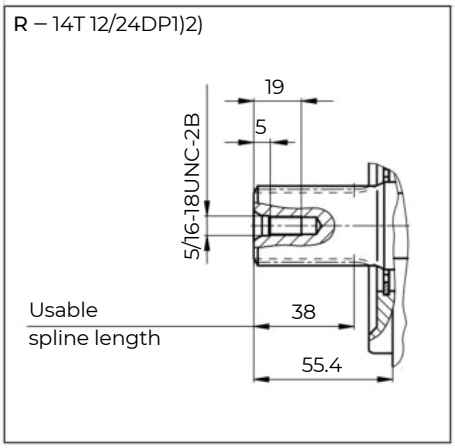
Splined shaft 1 1/4 in (SAE J744)

S – 14T 12/24DP1)



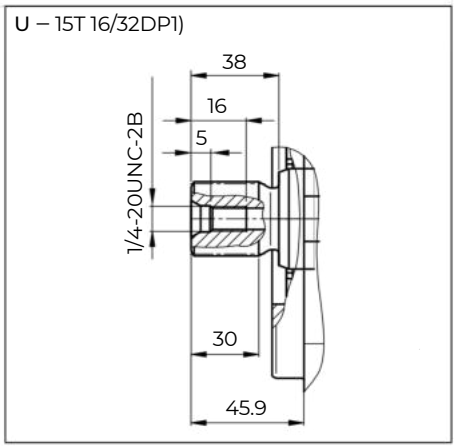
Splined shaft 1 1/4 in (SAE J744)

R – 14T 12/24DP1)2)



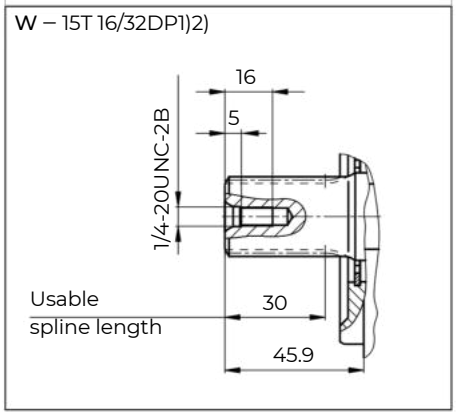
Splined shaft 1 in (SAE J744)

U – 15T 16/32DP1)



Splined shaft 1 in (SAE J744)

W – 15T 16/32DP1)2)



-Technical Data

Size		NG		18	28	45	71	88	100	140
Displacement, geometric, per revolution		$V_{g\,max}$	cm³	18	28	45	71	88	100	140
Rotational speed maximum)	at V_g max	n_{nom}	rpm	3300	3000	2600	2200	2100	2000	1800
	at $V_g < V_{g\,max}$²)	$n_{max\,perm}$	rpm	3900	3600	3100	2600	2500	2400	2100
Flow	at n_{nom} and $V_{g\,max}$	$q_{v\,max}$	l/min	59	84	117	156	185	200	252
	at n_E= 1500 rpm and $V_{g\,max}$	$q_{vE\,max}$	l/min	27	42	68	107	132	150	210
Power at Δp = 280 bar	at nnom, Vg max	P_{max}	kW	28	39	55	73	86	93	118
	at nE= 1500 rpm and Vg max	$P_{E\,max}$	kW	12.6	20	32	50	62	70	98
Torque at $V_{g\,max}$ and	Δp = 280 bar	T_{max}	Nm	80	125	200	316	392	445	623
	Δp = 100 bar	T	Nm	30	45	72	113	140	159	223
Rotary stiffness of drive shaft	S	c	Nm/rad	11087	22317	37500	71884	71884	121142	169437
	R	c	Nm/rad	14850	26360	41025	76545	76545	-	-
	U	c	Nm/rad	8090	16695	30077	52779	52779	91093	-
	W	c	Nm/rad	-	19898	34463	57460	57460	101847	165594
Moment of inertia for rotary group		J_{TW}	kgm²	0.00093	0.0017	0.0033	0.0083	0.0083	0.0167	0.0242
Maximum angular acceleration)		α	rad/s²	6800	5500	4000	2900	2600	2400	2000
Case volume		V	l	0.4	0.7	1.0	1.6	1.6	2.2	3.0
Weight without through drive (approx.)		m	kg	12.9	18	23.5	35.2	35.2	49.5	65.4
Weight with through drive (approx.)				13.8	19.3	25.1	38	38	55.4	74.4

HA10VO31: Ordering Code and Specifications Table

Type Code	Displacement (cm3)	Rotation	Version	Sealing	Control	Ports	Mounting Flange	Shaft	Through Drive
HA10VO31	**45,71,100**	**Right, Left** (cw,ccw)	**Special Classic** (S,C)	**Nitrile, Viton** (N,V)	**LS-X LS-C PR-R PT-L**	**Side Metric Side Unf** (SM,SUN)	**2H** (SAE2 Hole) (ISO-3019-1)	**Standart** (S) **High Torque** (T)	**T01 T68 T04 T07**

LS-X	Load Sensing X Decompression
LS-C	Load Sensing Closed
PR-R	Pressure Remote
PT-L	Pressure Torque Limiter
PR	Hydraulic Pressure Control

45 cc	●	●		
71 cc		●	●	
100 cc			●	●
	13T (16/32)	**15T** (16/32)	**14T** (12/24)	**17T** (12/24)

	Through Drive			Flange	Shaft
T01	o	o	o	**SAEA2**	5/8" 9T 16/32 DP
T68	o	o	o	**SAEB2**	7/8" 13T 16/32 DP
T04	o	o	o	**SAEB2**	1" 15T 16/32 DP
T07		o	o	**SAEC2**	1 1/4" 14T 12/24 DP
	45	**71**	**100**	**Standart**	Standart