

NEW

2XPW

Cast Iron Gear Pump



xtreme POWER



 **walvoil**
FLUID POWER E| MOTION



2XPW

Cast Iron Gear Pump



Walvoil presents the new range of 2XPW Cast Iron Pumps.

These pumps are particularly suitable for all applications where traditional aluminum pumps are used at the limit of their performance; eg. for installation on mobile equipment intended for heavy duty operating cycles, where pressures or mechanical stresses are typically higher.

Its modular construction allows the same versatility of the Group 2 series with aluminum body, while maintaining the possible configurations in terms of flanges, shafts and integrated valves.

- ☐ High efficiencies
- ☐ High pressure limits
- ☐ Reduced number of components
- ☐ Reduced overall dimension

NOTE: for motor configuration, special solutions and aluminium body please contact Sales Department

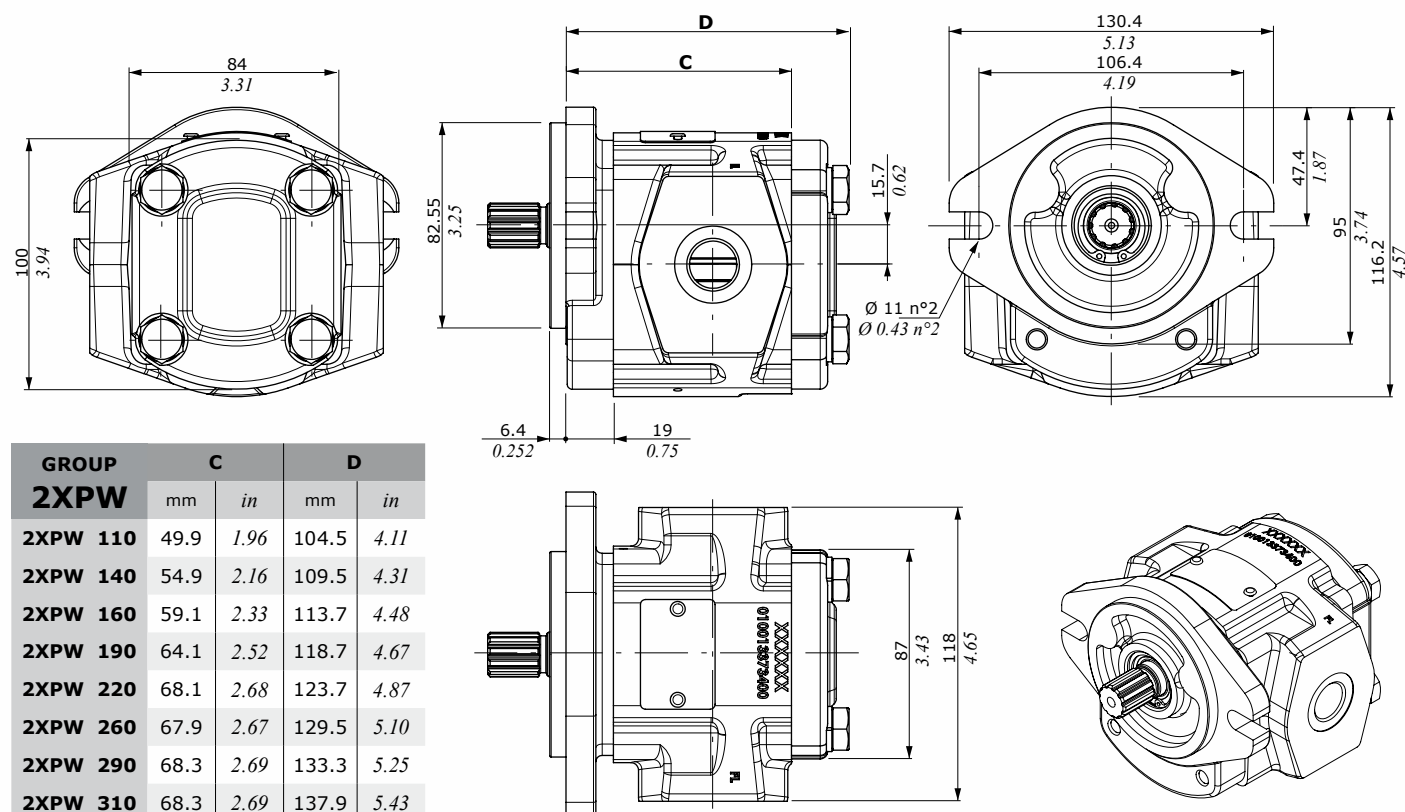
GENERAL WORKING CONDITIONS		
Displacement		from 11.2 to 31.5 cm ³ /rev from 0.68 to 1.92 in ³ /rev
Max continuous pressure	up to	270 bar - 3900 psi
Fluid		hydraulic mineral oil-based
Fluid temperature range	with NBR (buna N) seals	from -20 to +80 °C from -4 to +176 °F
	with FPM (viton) seals	from -15 to +100 °C from +5 to +212 °F
Viscosity	Recommended	from 15 to 92 mm ² /s (cSt)
	Permitted for starting	2000 mm ² /s (cSt)
Max level of contamination	Recommended for operating pressure > 150 bar (2150 psi)	20/18/15 ISO 4406 class 9 (NAS 1638)
	Recommended for operating pressure < 150 bar (2150 psi)	21/18/15 ISO 4406 class 10 (NAS 1638)

Technical data

GROUP 2XPW	Displacement		Max continuous pressure		Max intermittent pressure		Max peak pressure		Max rotation speed
	cm ³ /rev	in ³ /rev	bar	psi	bar	psi	bar	psi	rpm
2XPW 110	11.2	0.68	270	3900	290	4200	300	4350	3500
2XPW 140	14.2	0.86	270	3900	290	4200	300	4350	3500
2XPW 160	16.8	1.02	250	3600	270	3900	280	4050	3500
2XPW 190	19.8	1.20	250	3600	270	3900	280	4050	3500
2XPW 220	22.9	1.39	250	3600	270	3900	280	4050	3000
2XPW 260	26.4	1.61	230	3350	250	3600	260	3750	3000
2XPW 290	29.1	1.77	200	2900	220	3200	230	3350	2500
2XPW 310	31.5	1.92	190	2750	210	3050	220	3200	2500

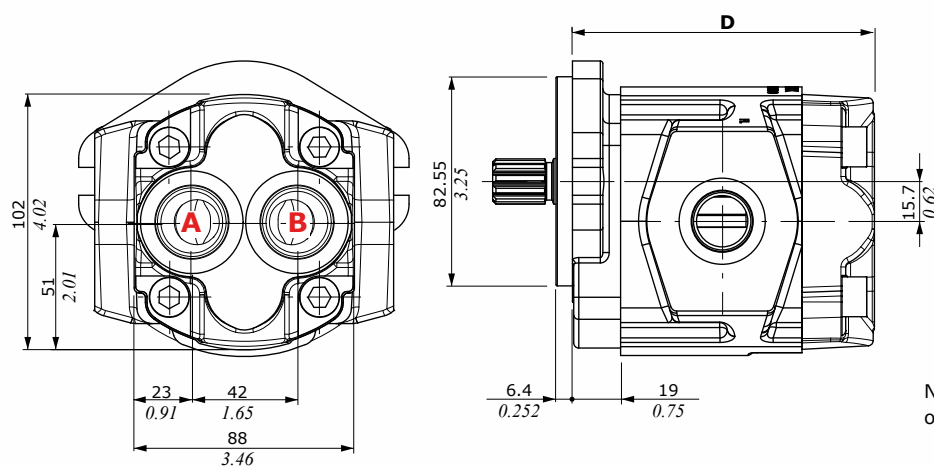
NEW

Dimensions



The dimensional drawing represents the version with **SAEA** flange (for other flanges, see the next page).

Cover with ports for rear connection



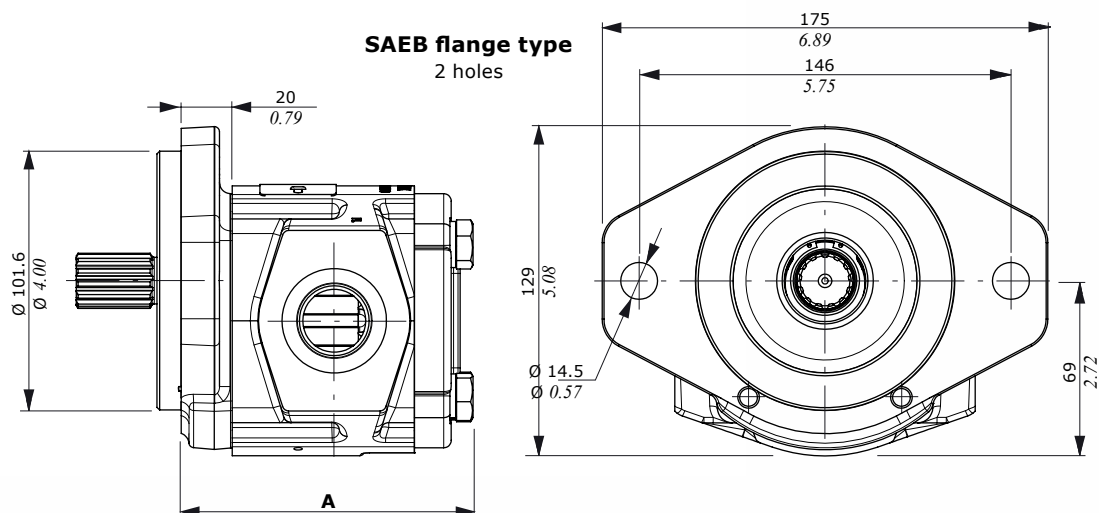
GROUP	D	
2XPW	mm	in
2XPW 110	110.4	4.35
2XPW 140	115.5	4.55
2XPW 160	119.7	4.71
2XPW 190	124.7	4.91
2XPW 220	129.7	5.11
2XPW 260	135.5	5.33
2XPW 290	139.3	5.48
2XPW 310	143.9	5.67

NOTE: the ports can be present both or individually, of the same or different sizes

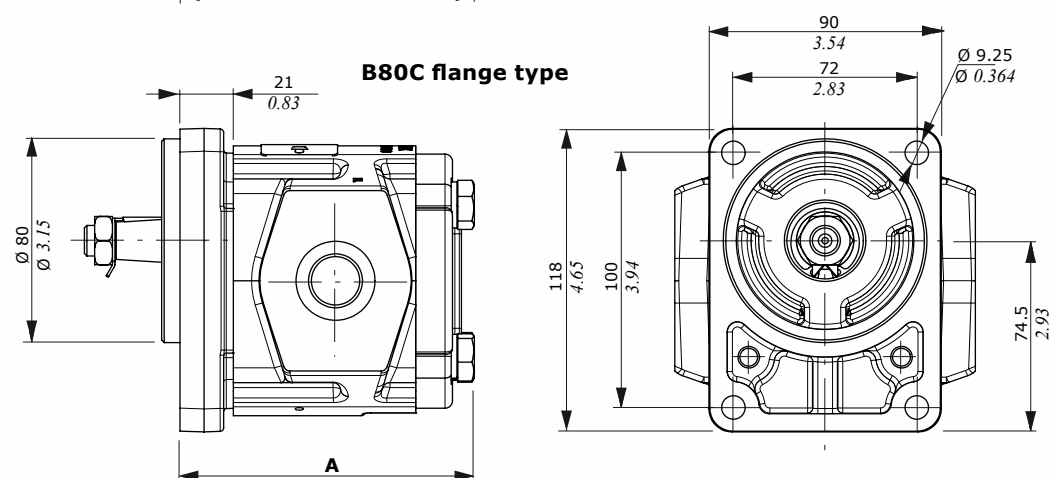
2XPW

Cast Iron Gear Pump

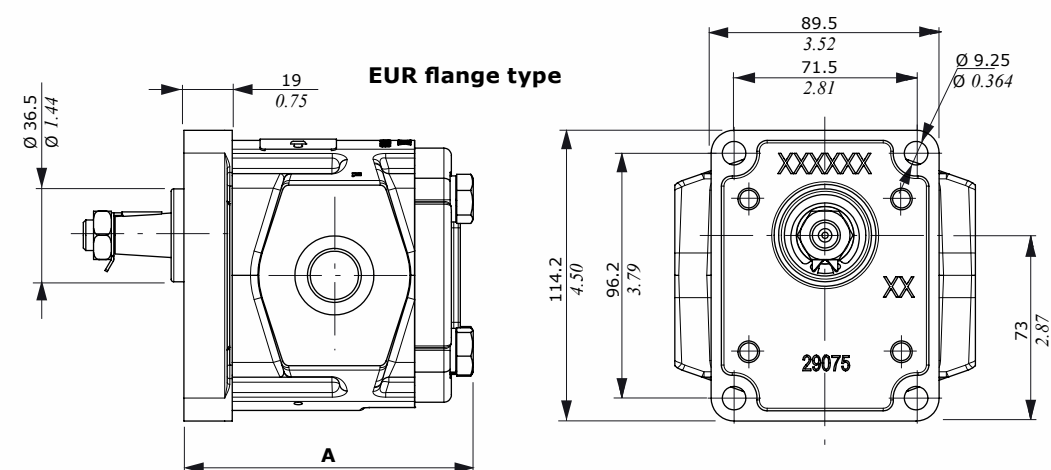
Dimensions



GROUP 2XPW	A	
	mm	in
2XPW 110	105.5	4.15
2XPW 140	110.5	4.35
2XPW 160	114.7	4.52
2XPW 190	119.7	4.71
2XPW 220	124.7	4.91
2XPW 260	130.5	5.14
2XPW 290	134.3	5.29
2XPW 310	138.9	5.47



GROUP 2XPW	A	
	mm	in
2XPW 110	106.5	4.19
2XPW 140	111.5	4.39
2XPW 160	115.7	4.56
2XPW 190	120.7	4.75
2XPW 220	125.7	4.95
2XPW 260	131.5	5.18
2XPW 290	135.3	5.33
2XPW 310	139.9	5.51



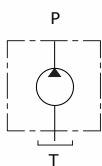
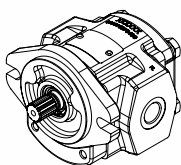
GROUP 2XPW	A	
	mm	in
2XPW 110	104.5	4.11
2XPW 140	109.5	4.31
2XPW 160	113.7	4.48
2XPW 190	118.7	4.67
2XPW 220	123.7	4.87
2XPW 260	129.5	5.10
2XPW 290	133.3	5.25
2XPW 310	137.9	5.43

NEW

Configurations

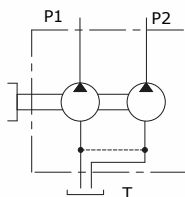
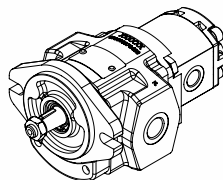
Single pump:

2XPW



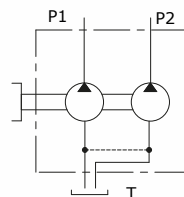
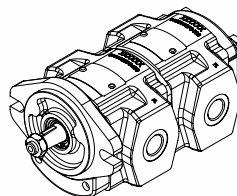
Double pump:

2XPW + 1SP



Double pump:

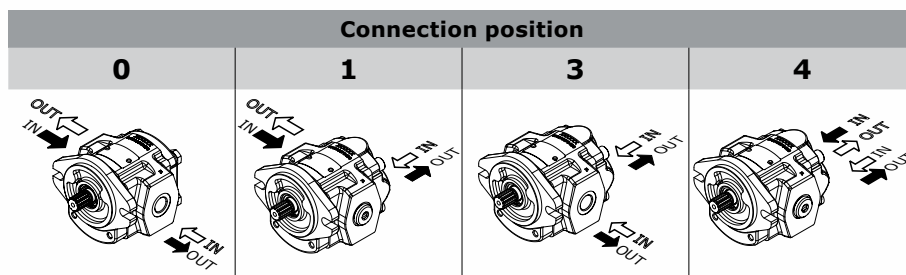
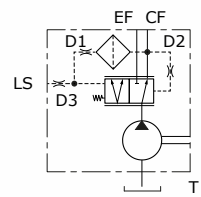
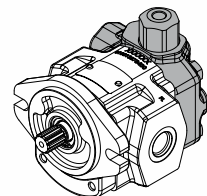
2XPW + 2XPW



NOTE: for separate stage solutions
please contact Sales Department

Single pump with back
cover with auxiliary
function:

2SPW + AUX



Clockwise rotation - **D**

Anti-clockwise rotation - **S**

Auxiliary valves available

VLPI	Pressure relief valve (internal drain)
VLPE	Pressure relief valve (external drain)
VRF	Flow regulator
VRFVLPI	Flow divider and relief valve
UNLD	Unloading valve
CP (LS)	Priority valve

Portings and connections		porting type				
		G	U	T	N	F
connections options	0	•	•	•	•	•
	1	•	•	-	-	-
	3	•	•	-	-	-
	4	•	•	-	-	-

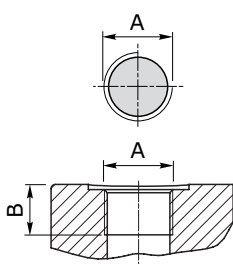
(-): for available connection, please contact our Sales Dpt.

2XPW

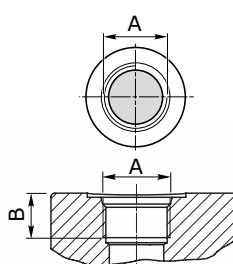
Cast Iron Gear Pump

Ports and connections

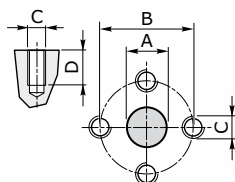
G: BSP



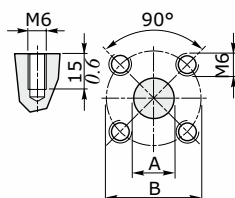
U: UN-UNF



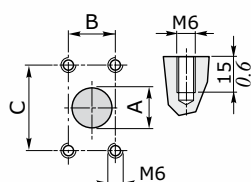
N: European flange



T: German flange



F: SAE J518-1 connection



GROUP 2XPW	Port Threading											
	G (BSP)						U (UN-UNF)					
	A		B		OUT		A		B		OUT	
	IN	OUT	mm	in	mm	in	IN	OUT	mm	in	mm	in
2XPW 110	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
2XPW 140	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
2XPW 160	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
2XPW 190	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
2XPW 220	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
2XPW 260	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
2XPW 290	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
2XPW 310	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67

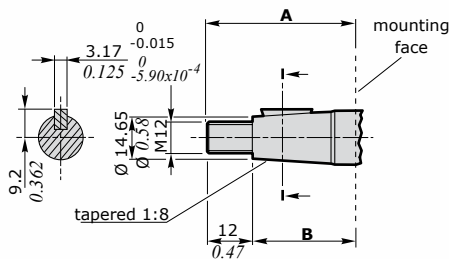
GROUP 2XPW	Port Threading											
	N (EUROPEAN)								T (GERMAN)			
	A		B		C		D		A		B	
	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	IN	OUT	Ø IN	Ø OUT	Ø IN	Ø OUT
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
2XPW 110	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 140	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 160	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 190	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 220	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 260	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 290	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59
2XPW 310	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59

GROUP 2XPW	Port Threading											
	F (SAE J518-1 connection)											
	A		B		C		Ø OUT		Ø IN		Ø OUT	
	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
2XPW 110	20	0.79	15	0.59	17.4	0.69	17.4	0.69	38	1.50	38	1.50
2XPW 140	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
2XPW 160	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
2XPW 190	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
2XPW 220	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
2XPW 260	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
2XPW 290	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50
2XPW 310	26	1.02	15	0.59	22.4	0.88	17.4	0.69	47.6	1.87	38	1.50

Shaft types

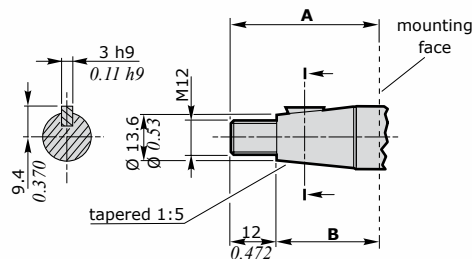
10

Torque 140 Nm - 103 lbft



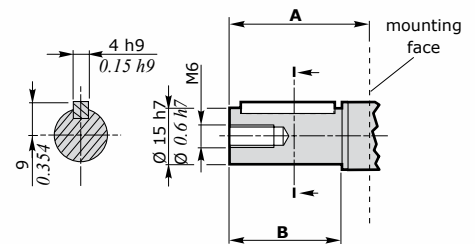
11

Torque 140 Nm - 103 lbft



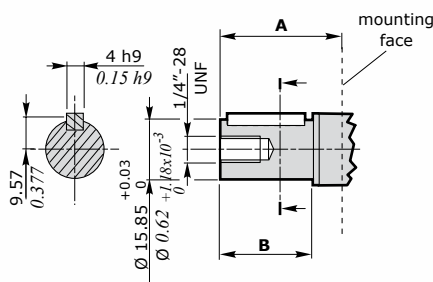
12

Torque 80 Nm - 59 lbft



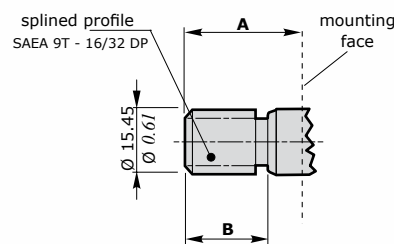
13

Torque 90 Nm - 66 lbft



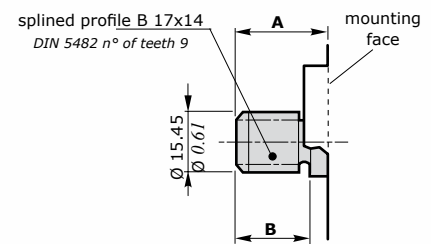
14

Torque 100 Nm - 74 lbft



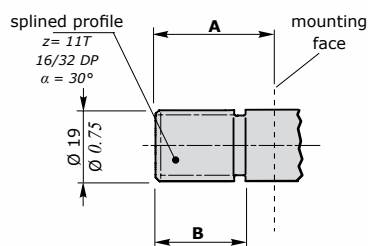
15

Torque 100 Nm - 74 lbft



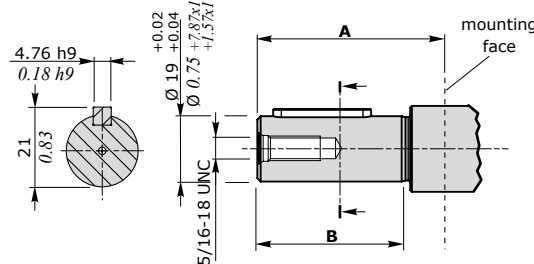
30

Torque 150 Nm - 110 lbft



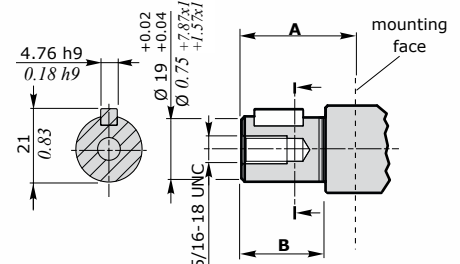
31

Torque 140 Nm - 103 lbft



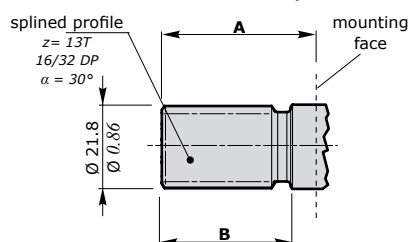
32

Torque 110 Nm - 81 lbft



45*

Torque 280 Nm - 207 lbft

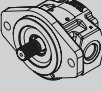
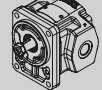
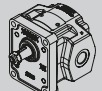


(*) Only for pump with **SAEB** flange

Shaft dimensions

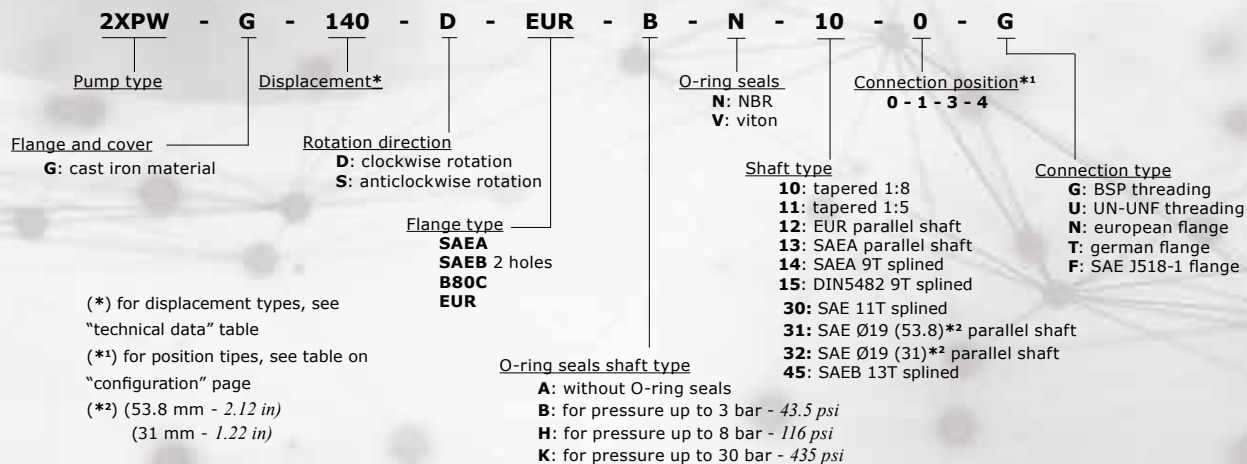
Type	Shaft dimensions											
	EUR - SAEA				SAEB				B80C			
	A		B		A		B		A		B	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
10	39.5	1.56	27.5	1.08	-	-	-	-	37.5	1.48	25.5	1.00
11	39.5	1.56	27.5	1.08	-	-	-	-	37.5	1.48	25.5	1.00
12	36.5	1.44	30	1.18	-	-	-	-	34.5	1.36	30	1.18
13	32	1.26	24	0.94	-	-	-	-	30	1.18	24	0.94
14	31.5	1.24	23	0.91	-	-	-	-	29.5	1.16	23	0.91
15	26	1.02	20	0.79	-	-	-	-	24	0.94	20	0.79
30	31.5	1.24	23.8	0.94	-	-	-	-	-	-	-	-
31	53.8	2.12	44.5	1.75	-	-	-	-	-	-	-	-
32	31	1.22	24	0.94	-	-	-	-	-	-	-	-
45*	-	-	-	-	41.2	1.62	34	1.34	-	-	-	-

Shaft - flange combination

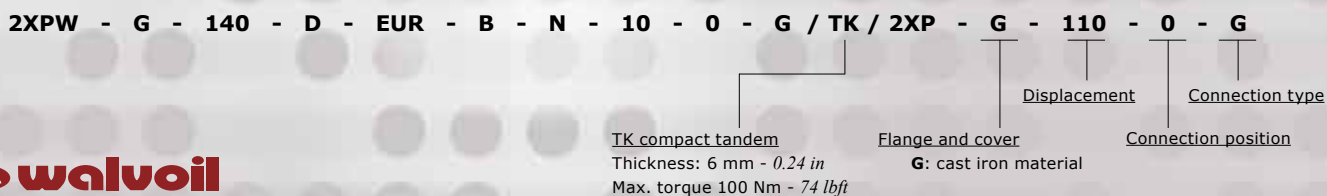
GROUP		Shaft type									
2XPW		10 Tapered 1:8	11 Tapered 1:5	12 EUR parallel shaft	13 SAEA parallel shaft	14 SAEA 9T splined	15 DIN5482 9T (26/24) splined	30 SAE 11T splined	31 SAE Ø19 (53.8 mm - 2.12 in) parallel shaft	32 SAE Ø19 (31 mm - 1.22 in) parallel shaft	45 SAEB 13T splined
SAEA SAEB 2F B80C EUR		●	●	●	◆	◆	●	◆	◆	◆	-
		●	●	●	●	●	●	-	-	-	◆
		●	◆	◆	●	●	◆	-	-	-	-
		◆	●	◆	●	●	●	-	-	-	-

◆ = STANDARD COMBINATION
● = AVAILABLE COMBINATION

Description composition



2XPW+2XP configuration example



D1WGCM04E - 2nd edition April 2021

