



walvoil
MOTION BY PEOPLE

NEW

xtreme
POWER

2XPW

Cast Iron Gear Pump



2XPW
CAST IRON
GEAR PUMP

- High efficiency
- High pressure limits
- Reduced number of components
- Reduced overall dimension



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.



WORKING CONDITIONS

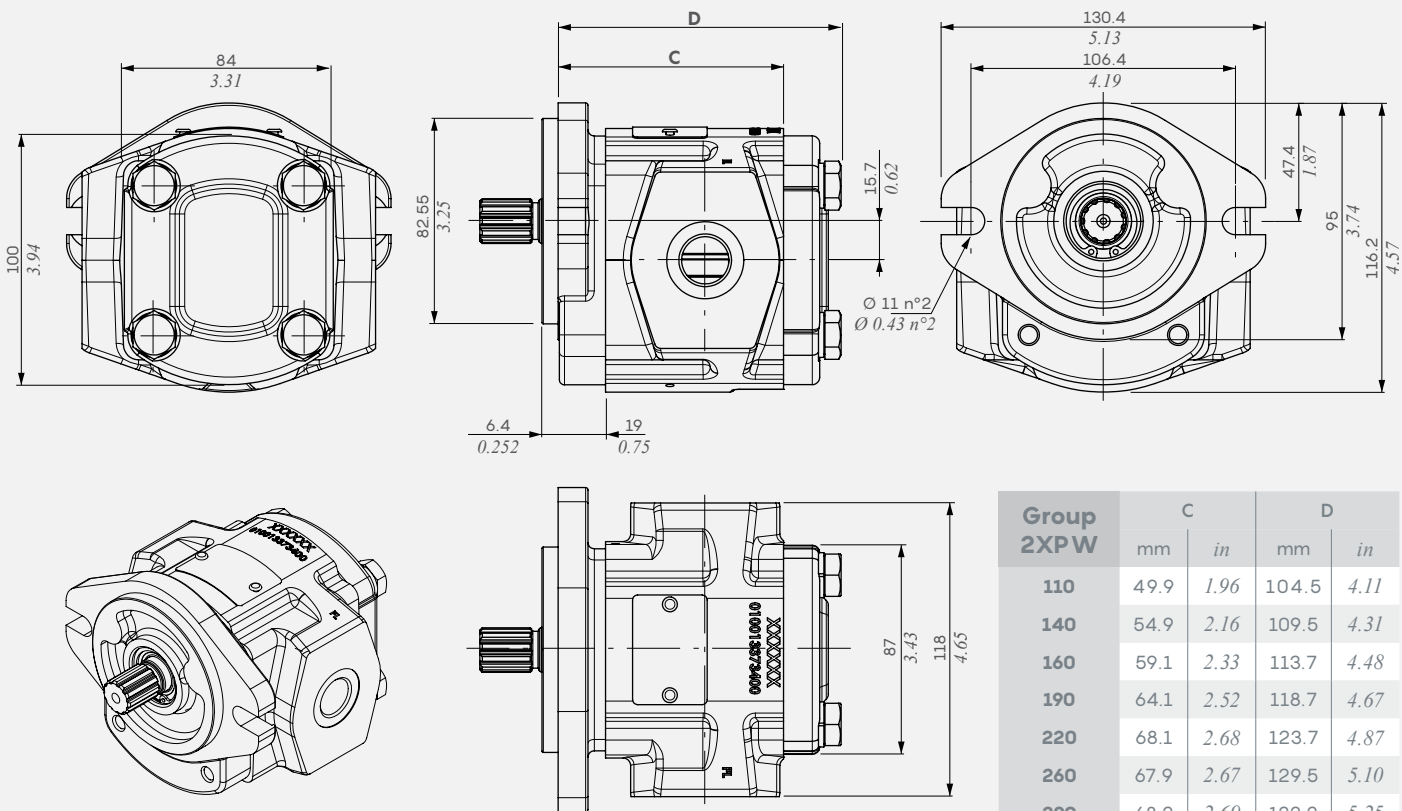
Displacement	from 11.2 to 31.5 cm ³ /rev from 0.68 to 1.92 in ³ /rev	
Max continuous pressure	Up to	270 bar 3900 psi
Fluid	hydraulic mineral oil-based	
Fluid temperature range	With NBR (buna N) seals	from -20 to +80 °C from -4 to +176 °F
	With FPM (viton) seals	from -15 to +100 °C from +5 to +212 °F
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)	21/19/16 ISO 4406 class 10 (NAS 1638)

Note: For motor configuration, special solutions and aluminium body please contact Sales Department

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
110	11.2	0.68	270	3900	290	4200	300	4350	3500
140	14.2	0.86	270	3900	290	4200	300	4350	3500
160	16.8	1.02	250	3600	270	3900	280	4050	3500
190	19.8	1.20	250	3600	270	3900	280	4050	3500
220	22.9	1.39	250	3600	270	3900	280	4050	3000
260	26.4	1.61	230	3350	250	3600	260	3750	3000
290	29.1	1.77	200	2900	220	3200	230	3350	2500
310	31.5	1.92	190	2750	210	3050	220	3200	2500

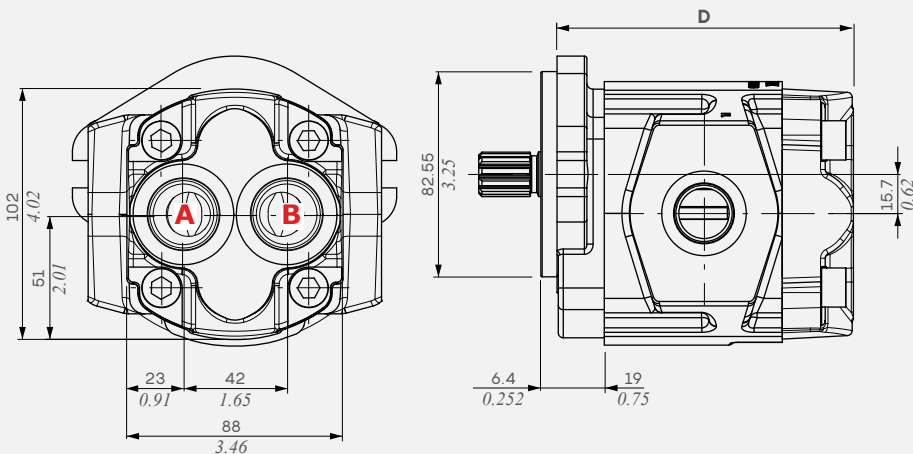
DIMENSIONAL DATA



Group 2XPW	C		D	
	mm	in	mm	in
110	49.9	1.96	104.5	4.11
140	54.9	2.16	109.5	4.31
160	59.1	2.33	113.7	4.48
190	64.1	2.52	118.7	4.67
220	68.1	2.68	123.7	4.87
260	67.9	2.67	129.5	5.10
290	68.3	2.69	133.3	5.25
310	68.3	2.69	137.9	5.43

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

Cover with ports for rear connection

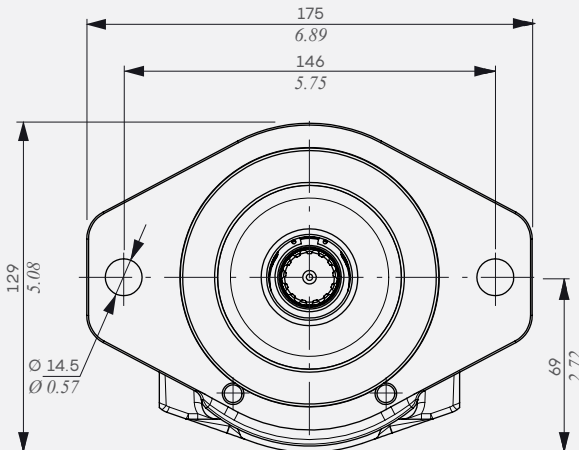
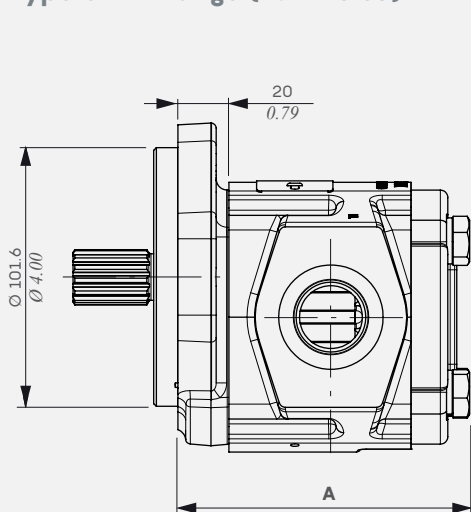


Group 2XPW	D	
	mm	in
110	110.4	4.35
140	115.5	4.55
160	119.7	4.71
190	124.7	4.91
220	129.7	5.11
260	135.5	5.33
290	139.3	5.48
310	143.9	5.67

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

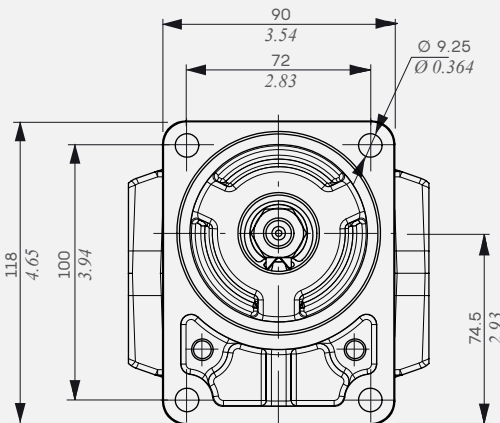
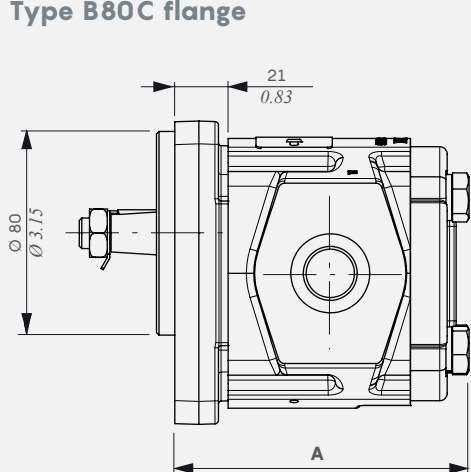
DIMENSIONAL DATA

Type SAEB flange (n. 2 holes)



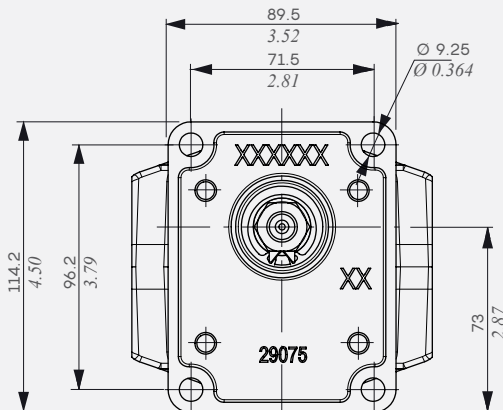
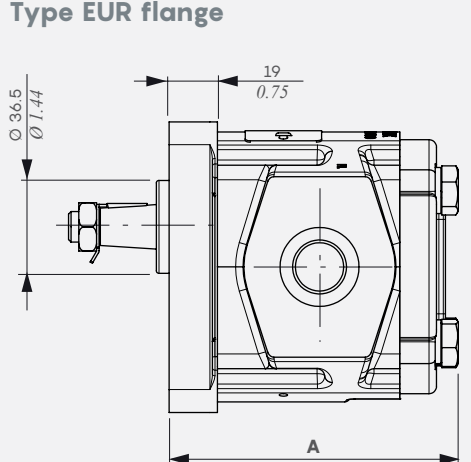
Group 2XPW	A	
	mm	in
110	105.5	4.15
140	110.5	4.35
160	114.7	4.52
190	119.7	4.71
220	124.7	4.91
260	130.5	5.14
290	134.3	5.29
310	138.9	5.47

Type B80C flange



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

Type EUR flange

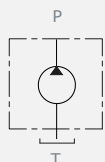
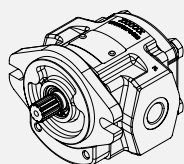


Group 2XPW	A	
	mm	in
110	104.5	4.11
140	109.5	4.31
160	113.7	4.48
190	118.7	4.67
220	123.7	4.87
260	129.5	5.10
290	133.3	5.25
310	137.9	5.43

CONFIGURATIONS

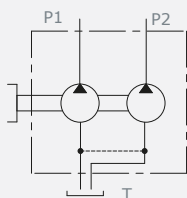
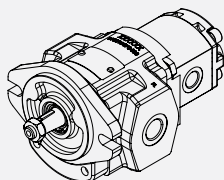
Single pump

2XPW



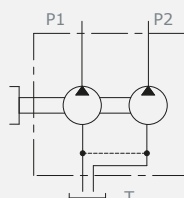
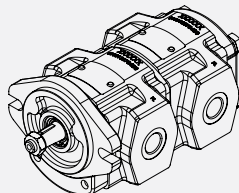
Double pump

2XPW + 1SP



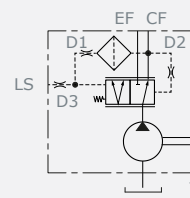
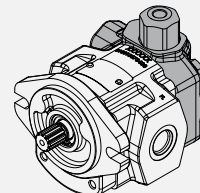
Double pump

2XPW + 2XPW

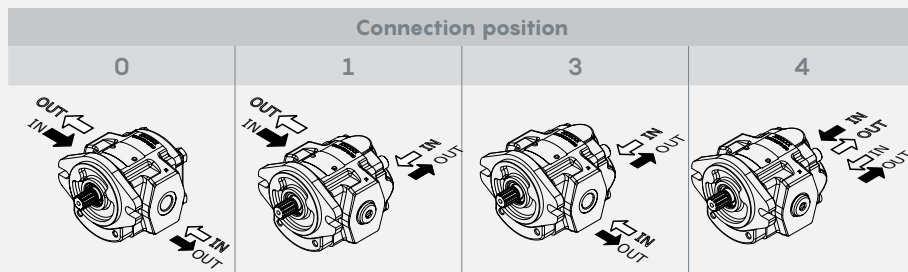


Single pump with back cover with auxiliary function:

2XPW + AUX



Note: For separate stage solutions please contact Sales Department



Clockwise rotation - D

Anti-clockwise rotation - S

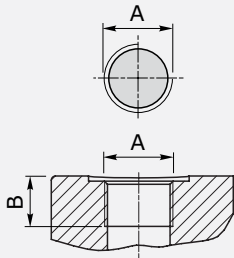
Auxiliary valves available	
VLPI	Pressure relief valve (internal drain)
VLPE	Pressure relief valve (external drain)
VRF	Flow regulator
VRFVLPI	Flow divider and relief valve
UNLD	Unloading valve
CP (LS)	Priority valve

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

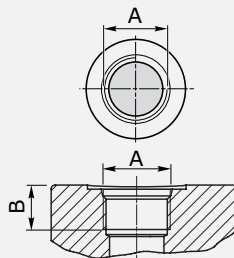
(-): For available connection, please contact our Sales Dpt.

PORT AND CONNECTIONS

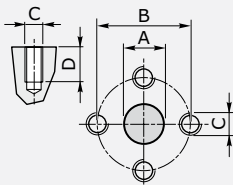
G: BSP



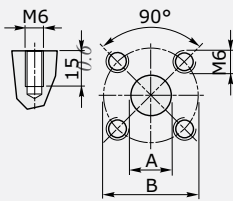
U: UN-UNF



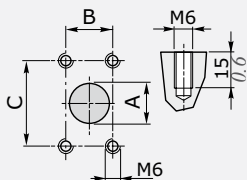
N: European flange



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
110	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
140	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
160	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
190	G 3/4"	G 1/2"	17	0.67	16	0.63	SAE12	SAE10	20	0.79	17	0.67
220	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
260	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
290	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67
310	G 1"	G 1/2"	17	0.67	16	0.63	SAE16	SAE10	20	0.79	17	0.67

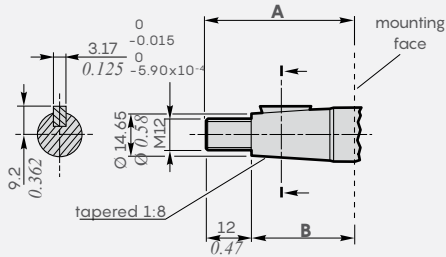
Group 2XPW	Port Threading																					
	N (EUROPEAN)								T (GERMAN)													
	A		B		C		D		A		B											
	Ø IN	Ø OUT	Ø IN	Ø OUT	Ø IN	Ø OUT	IN	OUT	Ø IN	Ø OUT	Ø IN	Ø OUT										
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in										
110	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
140	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
160	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
190	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
220	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
260	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
290	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38
310	19	0.75	13	0.51	40	1.57	30	1.18	M8	M6	15	0.59	15	0.59	20	0.79	15	0.59	40	1.57	35	1.38

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

SHAFT TYPES

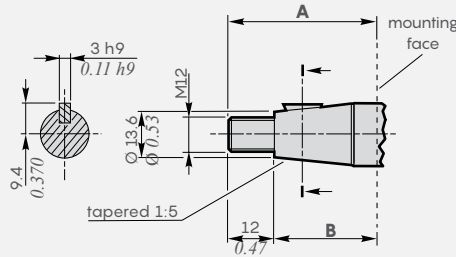
Type 10

Torque 140 Nm - 103 lbf^t



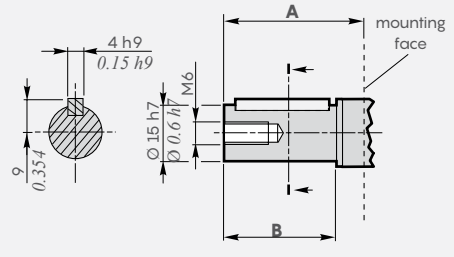
Type 11

Torque 140 Nm - 103 lbf^t



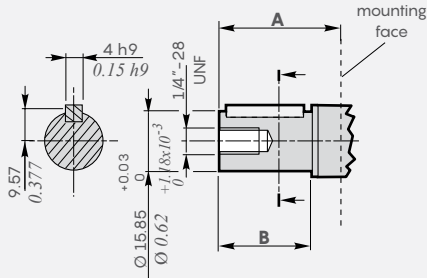
Type 12

Torque 80 Nm - 59 lbf^t



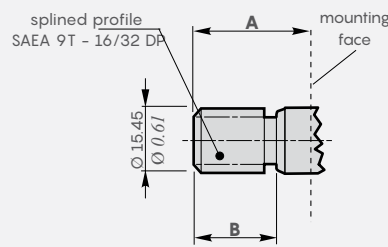
Type 13

Torque 90 Nm - 66 lbf^t



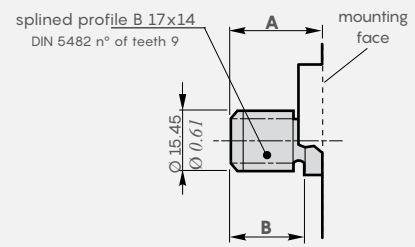
Type 14

Torque 100 Nm - 74 lbf^t



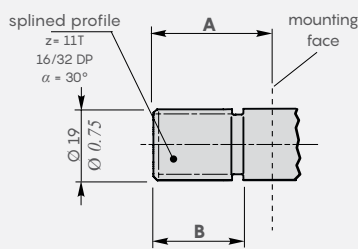
Type 15

Torque 100 Nm - 74 lbf^t



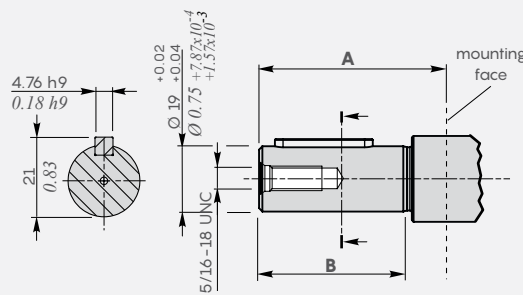
Type 30

Torque 150 Nm - 110 lbf^t



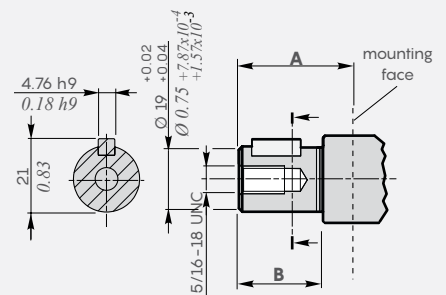
Type 31

Torque 140 Nm - 103 lbf^t



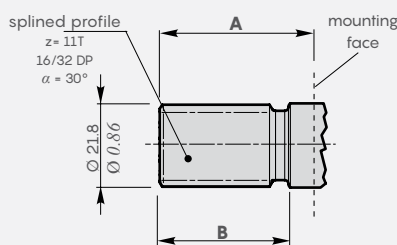
Type 32

Torque 110 Nm - 81 lbf^t



Type 45*

Torque 280 Nm - 207 lbf^t



Note(*): Only for pump with SAEB flange

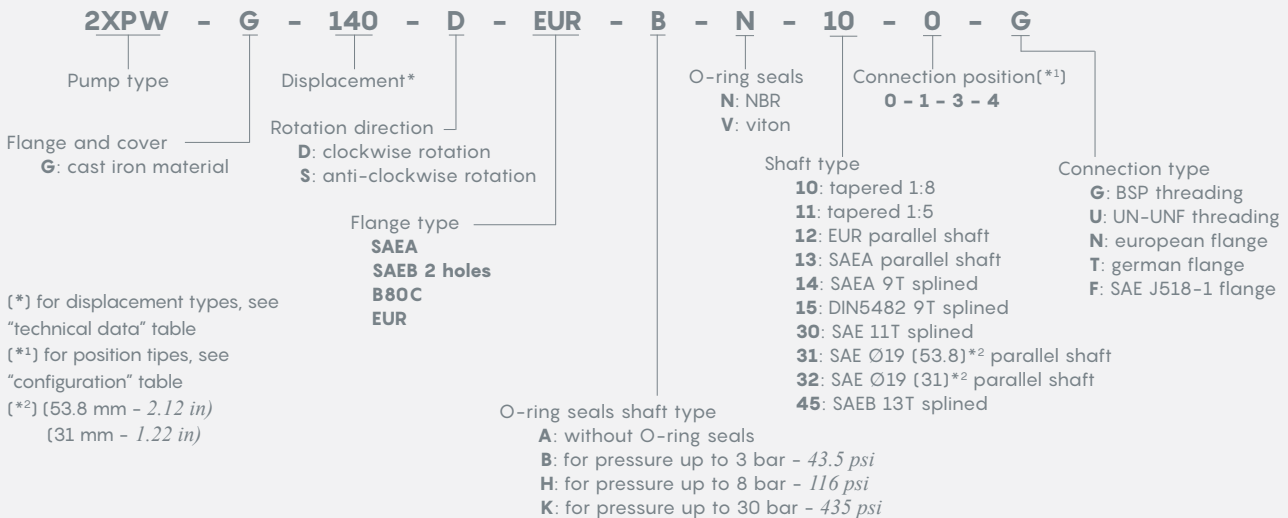
Type	Shaft dimensions											
	EUR - SAEA				SAEB				B80C			
	A	mm	in	B	A	mm	in	B	A	mm	in	B
10	39.5	1.56	27.5	1.08	-	-	-	-	37.5	1.48	25.5	1.00
11	39.5	1.56	27.5	1.08	-	-	-	-	37.5	1.48	25.5	1.00
12	36.5	1.44	30	1.18	-	-	-	-	34.5	1.36	30	1.18
13	32	1.26	24	0.94	-	-	-	-	30	1.18	24	0.94
14	31.5	1.24	23	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 2XPW	Shaft type									
	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

