# **Grundfos** Domestic & Commercial HVAC Price List June 2022 Category 1





### **PRODUCTS INCLUDED:**

**ALPHA3** 

UPS3

MAGNA

TP(E)D

KP/AP/Unilift

SOLOLIFT2

SCALA2

CUE









### PLEASE NOTE THE FOLLOWING FROM OUR TERMS AND CONDITIONS OF SALE:

A copy of our full terms and conditions are available at the back of this price list & all prices are delivered at place (DAP) and subject to VAT at the standard rate.

### MINIMUM ORDER VALUE

Our minimum order value is £55.00 NET. Orders between the minimum order value and the low order threshold of £335.00 NET for pumps or £130.00 NET for Category 4, S1,S2,S3,S4 items will be subject to a £37.00 NET handling fee.

### **EXPRESS DELIVERY OPTIONS;**

### INTERSPEED (PER ITEM) (above 150 Kgs - subject to transport availability and additional cost)

- CR(I)(E), CRN(E) Vertical Multistage
- Non-stock SP/SPA models (with or without drop cable cut in 5 metre increments. Please note; resin cable joint will take 24 hours to set)
- Order must be received electronically by 10.45am despatch same day, delivery by Express Carrier Service UK (\*note restrictions apply) £120.00 NET (PER ITEM)

### BOXSPEED (PER ITEM) - (above 100 Kgs - subject to transport availability and additional cost)

- ALPHA, UPS, UPN, UPS3/UPM Circulators
- Magna (D) Glandless Circulators
- UP/UPS/Magna Replacement Heads/Terminal boxes
- TPE(D), NB(E) Glanded
- CM, CME Horizontal Multistage
- JP, MQ and Tanks/Vessels (up to 500 Litre)
- CMB(E), Boosters, Scala
- AP, KP, CC, SL1, SLV, Unilift, Sololift
- SQ, SQE, SB(A), SP2A, 3A & 5A >1.5kW (Excluding pumps with cable fitted as well as SP longer than 2.4 metres)
- Motors, Flanges & Unions, Pump Components, Chamber Stacks
- Order must be received electronically before 13:30pm despatch same day, delivery by Express Carrier Service UK (\*note restrictions apply) FIRST ITEM £90.00 NET & ADDITIONAL ITEMS £40.00 EACH (PER ORDER)

### SPARESPEED (PER ITEM)

- Only applies to spares kits, (not chamber stacks, components, pump heads or terminal boxes)
- Order must be received electronically before 13:30pm despatch same day, delivery by Express Carrier Service UK (\*note restrictions apply) FIRST ITEM £75.00 NET & ADDITIONAL ITEMS £35.00 EACH (PER ORDER)
- \* Express Carrier Service ONLY guaranteed if placed on time via Extranet/EDI. Deliveries to the Highlands, certain mainland post codes and offshore UK may take an extra day. All services are dependent on component and product availability. Grundfos can guarantee despatch or availability for collection same day but cannot guarantee delivery. Grundfos cannot accept any cancellations or amendments once the goods have been despatched. Cancellations are subject to the Product Returns Fee below. BREXIT Express delivery cut off times for deliveries into the UK from an EU have changed from 1:30PM to 10:00AM & all deliveries to Northern Ireland will all be despatched from our DC in Sunderland only.

### SPARES STANDARD DELIVERY CHARGE

- A £30.00 NET handling fee will be applied, per order, to all orders for spares, pump components, spares kits.
- This charge does NOT apply if SPARESPEED, express service or our online ordering system (EDI), and/or Extranet are used for order placement.

### PRODUCT RETURNS FEE

• On receipt of written agreement from Grundfos, items can be returned and will be subject to a minimum 35% restocking fee. Goods must be returned in their original packaging and within 6 months of date of despatch. All returns will be subject to inspection, to ascertain age, condition and product type and can incur an increased restocking charge. Please contact <a href="mailto:grundfos-uk@sales.grundfos.com">grundfos-uk@sales.grundfos.com</a> with the original purchase order, to arrange collection. Do not send items to Grundfos as they will be refused delivery, collection will be arranged.

### Exclusions to Product Returns apply;

- Items with a NET value of £150.00 or less (per item).
- All Service kits, cable including attached to pump, assembled/engineered to order product and obsolete/phased out product cannot be returned.

### STORAGE CHARGE

• There will be a 2% storage charge of the item invoice value, payable per month, commencing one month from the date the goods were available for delivery from Grundfos.

### WARRANTY PERIOD

- Grundfos pumps are warranted for 24 months from installation or 30 months from manufacture; whichever is the sooner.
- There is a five-year warranty that covers manufacturing or material defects on domestic heating circulators: UPS3 15-50/65, UPS2 15-50/60, ALPHA models, Amazon & Amazon Universal shower pumps. From 1st March 2017 SCALA2 booster pumps when used in domestic applications were included.
- From 1st February 2020 there is a 5 year guarantee scheme Grundfos Go Guarantee, available on all MAGNA3, TPE, NBE and NKE models (conditions apply).

### SERVICE AND COMMISSIONING

Grundfos offers a wide range of service, repair and commissioning options. Please contact Service on 01525 850000 or email service-uk@sales.grundfos.com

# ORDER TRACKING AND PROOF OF DELIVERY

- Order status and Proof of Delivery can be obtained via Grundfos Extranet or MyGrundfos online portals.
- For extranet access contact grundfos-uk@sales.grundfos.com. Self-registration for MyGrundfos can be found here; https://uk.grundfos.com/mygrundfos

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# **CATEGORY 1 - DOMESTIC HEATING CIRCULATORS**

# **DOMESTIC HEATING PRODUCTS**

			240V 1ph 50Hz
Model	Pump Ports	£	<b>Product Code</b>
UPS3 15-50/65	No fittings	POA	99199622
ALPHA1 15-50/60 Model B	No fittings	POA	99415672
ALPHA3 15-50/60 Model B *	No fittings	POA	99371966
Light commercial UPS2 25-80	No fittings	POA	98707848
	No fittings	POA	
UPS2 32-80	No fittings	PUA	98707851



Union sets for pumps supplied with no fittings are listed separately and need to be ordered as an extra item.

- \* ALPHA3 Model B has integrated communication, separate reader not required.
- \*\* ALPHA Reader only for use with ALPHA3 Model A and Grundfos GO Balance mobile application

**Mobile applications:** Grundfos GO Balance Grundfos GO Remote



CATEGORY 1 - UP(N	)/UPS(N) HOT	WATER SI	ERVICE CIRCULAT	TORS			
<b>HOT WATER SERVICE C</b>	IRCULATORS					V	VRAS Approved
		240\	/ 1ph 50Hz			240V	1ph 50Hz
Model	Pump Ports	£	Product Code	Model	Pump Ports	£	Product Code
ALPHA1 15-50N Model B	No fittings	POA	99415696	UPS 25-55N	No fittings	705	95906772
UPS 15-50N	No fittings	423	97549426	UPS 25-80N	No fittings	845	98057227
UP 20-07N	No fittings	417	98057201	UPS 32-55N	No fittings	976	95906773
UP 20-15N	No fittings	463	98057205	UPS 32-80N	No fittings	1,115	98057247
UP 20-30N	No fittings	478	98057221	UPS 32-100N	No fittings	1,205	98057249
UP 20-45N	No fittings	519	98057222	UPS 40-50F N	No flanges	1,219	98057242
				UPS 40-80F N	No flanges	1,464	95906774

Only the highlighted pump is now available in yellow with a stainless steel body and silver nameplates.

Union sets, valves and flange sets for pumps supplied with no fittings/flanges are listed separately and need to be ordered as an extra item.

COMFORT HOT WATER SERVICE CIRCULATORS		١	WRAS Approved
		240	V 1ph 50Hz
Model		£	Product Code
COMFORT 15-14 B PM GB	HWS circulator	280	99164484
COMFORT 15-14 BA PM GB	HWS circulator with Autoadapt	462	99164487

Note: Comfort Hot Water Series Circulators should only be fitted into "pressurised" HWS circulation circuits.





UNIONS/VALVE SETS			UP/MAGNA/TP
ONIONS/ VALVE SETS			OF / IVIAGIVA/ IF
Item	Pumps	£	Product Code
%" BSP Brass Union Set	UP20N	47	529982
22mm Isolating Valve	UP20N	44	519801
1" BSP Brass Union Set	UPS15N, UPS25N,TP25-xx/2 R	19	529972
1¼" BSP Brass Union Set	UPS32N,TP32-xx/2 R	122	509971
Union set, thread G1 1/2xRp1 CI FZG	UPS2 25-80, MAGNA1/3 25, TP25	14	99672022
1¼" BSP Special Union Set	UPS2 25-80, MAGNA1/3 25, TP25	52	529821
Union set, thread G2xRp1 1/4 CI FZG	UPS2 32-80, MAGNA1/3 32, TP32	14	99672033
1½" BSP PN10 Bronze Flange Set	UP40-xx F N	1156	539910
Valve kit COMFORT (Isolating and Non-return)	COMFORT 15-14 B/BA	54	00ID8748

SINGLE HEAD MAG			
	<u> </u>		OV 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA1 25-40	1½" BSPM	633	99221216
MAGNA1 25-60	1½" BSPM	751	99221217
MAGNA1 25-80	1½" BSPM	855	99221213
MAGNA1 25-100	1½" BSPM	947	99221214
MAGNA1 25-120	1½" BSPM	1,065	99221215
MAGNA1 32-40	2" BSPM	779	99221233
MAGNA1 32-60	2" BSPM	910	99221234
MAGNA1 32-80	2" BSPM	947	99221235
MAGNA1 32-100	2" BSPM	1,040	99221236
MAGNA1 32-40F	32mm Flanged	857	99221263
MAGNA1 32-60F	32mm Flanged	1,002	99221269
MAGNA1 32-80F	32mm Flanged	1,052	99221275
MAGNA1 32-100F	32mm Flanged	1,211	99221237
MAGNA1 32-120F	32mm Flanged	1,618	99221285
MAGNA1 40-40F*	40mm Flanged	1,067	99221291
MAGNA1 40-60F*	40mm Flanged	1,171	99221292
MAGNA1 40-80F*	40mm Flanged	1,550	99221303
MAGNA1 40-100F*	40mm Flanged	1,767	99221304
MAGNA1 40-120F	40mm Flanged	1,961	99221305
MAGNA1 40-150F	40mm Flanged	2,396	99221306
MAGNA1 40-180F	40mm Flanged	2,755	99221307
MAGNA1 50-60F**	50mm Flanged	2,082	99221333
MAGNA1 50-80F	50mm Flanged	2,291	99221334
MAGNA1 50-100F	50mm Flanged	2,426	99221335
MAGNA1 50-120F	50mm Flanged	2,560	99221336
MAGNA1 50-150F	50mm Flanged	2,950	99221337
MAGNA1 50-180F	50mm Flanged	3,460	99221338

CATECODY 1 MACNA1 VADIABLE CREED CIRCLIAN

			MAGNA1
		230-24	0V 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA1 65-40F	65mm Flanged	2,216	99221382
MAGNA1 65-60F	65mm Flanged	2,531	99221371
MAGNA1 65-80F	65mm Flanged	2,755	99221372
MAGNA1 65-100F	65mm Flanged	2,906	99221373
MAGNA1 65-120F	65mm Flanged	3,114	99221374
MAGNA1 65-150F	65mm Flanged	3,592	99221375
MAGNA1 80-60F	80mm Flanged	2,921	99221406
MAGNA1 80-80F	80mm Flanged	3,144	99221407
MAGNA1 80-100F	80mm Flanged	3,428	99221408
MAGNA1 80-120F	80mm Flanged	3,846	99221409
MAGNA1 100-40F	100mm Flanged	3,114	99221438
MAGNA1 100-60F	100mm Flanged	3,399	99221439
MAGNA1 100-80F	100mm Flanged	3,682	99221440
MAGNA1 100-100F	100mm Flanged	4,012	99221441
MAGNA1 100-120F	100mm Flanged	4,551	99221442



		230-240	OV 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA1 D 32-40	2" BSPM	1,528	99221238
MAGNA1 D 32-60	2" BSPM	1,752	99221239
MAGNA1 D 32-80	2" BSPM	1,924	99221240
MAGNA1 D 32-100	2" BSPM	2,006	99221241
MAGNA1 D 32-40F	32mm Flanged	1,684	99221267
MAGNA1 D 32-60F	32mm Flanged	1,969	99221273
MAGNA1 D 32-80F	32mm Flanged	2,005	99221279
MAGNA1 D 32-100F	32mm Flanged	2,307	99221242
MAGNA1 D 32-120F	32mm Flanged	3,273	99221286
MAGNA1 D 40-40F*	40mm Flanged	2,098	99221293
MAGNA1 D 40-60F*	40mm Flanged	2,180	99221294
MAGNA1 D 40-80F*	40mm Flanged	3,084	99221308
MAGNA1 D 40-100F*	40mm Flanged	3,401	99221309
MAGNA1 D 40-120F	40mm Flanged	4,091	99221310
MAGNA1 D 40-150F	40mm Flanged	4,608	99221311
MAGNA1 D 40-180F	40mm Flanged	5,576	99221312
MAGNA1 D 50-40F**	50mm Flanged	3,576	99230357
MAGNA1 D 50-60F**	50mm Flanged	4,213	99221339
MAGNA1 D 50-80F	50mm Flanged	4,636	99221340
MAGNA1 D 50-100F	50mm Flanged	4,910	99221341
MAGNA1 D 50-120F	50mm Flanged	5,182	99221342
MAGNA1 D 50-150F	50mm Flanged	5,970	99221343
MAGNA1 D 50-180F	50mm Flanged	7,001	99221345

			MAGNA1 D
		230-24	0V 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA1 D 65-40F	65mm Flanged	4,485	99221376
MAGNA1 D 65-60F	65mm Flanged	5,122	99221377
MAGNA1 D 65-80F	65mm Flanged	5,576	99221378
MAGNA1 D 65-100F	65mm Flanged	5,879	99221379
MAGNA1 D 65-120F	65mm Flanged	6,304	99221380
MAGNA1 D 65-150F	65mm Flanged	7,155	99221381
MAGNA1 D 80-40F	80mm Flanged	5,365	99230392
MAGNA1 D 80-60F	80mm Flanged	5,910	99221414
MAGNA1 D 80-80F	80mm Flanged	6,365	99221415
MAGNA1 D 80-100F	80mm Flanged	6,343	99221416
MAGNA1 D 80-120F	80mm Flanged	7,119	99221417
MAGNA1 D 100-40F	100mm Flanged	6,304	99221448
MAGNA1 D 100-60F	100mm Flanged	6,880	99221449
MAGNA1 D 100-80F	100mm Flanged	6,815	99221450
MAGNA1 D 100-100F	100mm Flanged	7,424	99221451
MAGNA1 D 100-120F	100mm Flanged	8,421	99221452



\*/\*\* Due to differences in port to port dimensions, when replacing MAGNA or UPS/D models with an indicated MAGNA1 a spacer kit may be required. Available as 2 kits, 1 for 40mm MAGNA1 models and 1 for 50mm MAGNA1 models, each includes a suitable spacer, a set of extended bolts, nuts and 3 gaskets.

Spacer Kits MAGNA1 / MAGNA3 type	Pressure	£	Product Code
*40mm	PN 6	75	96281076
**50mm	PN 6	86	96281077

	MAGNA3 VARIA		
SINGLE HEAD MAG	SNA3 VARIABLE SI		
		230-240	OV 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA3 25-40	1½" BSPM	692	97924244
MAGNA3 25-60	1½" BSPM	822	97924245
MAGNA3 25-80	1½" BSPM	939	97924246
MAGNA3 25-100	1½" BSPM	1,031	97924247
MAGNA3 25-120	1½" BSPM	1,158	97924248
MAGNA3 32-40	2" BSPM	850	97924254
MAGNA3 32-60	2" BSPM	995	97924255
MAGNA3 32-80	2" BSPM	1,041	97924256
MAGNA3 32-100	2" BSPM	1,130	97924257
MAGNA3 32-40F	32mm Flanged	938	98333834
MAGNA3 32-60F	32mm Flanged	1,096	98333854
MAGNA3 32-80F	32mm Flanged	1,156	98333874
MAGNA3 32-100F	32mm Flanged	1,317	97924258
MAGNA3 32-120 F	32mm Flanged	2,187	97924259
MAGNA3 40-40F*	40mm Flanged	1,169	97924266
MAGNA3 40-60F*	40mm Flanged	1,273	97924267
MAGNA3 40-80 F*	40mm Flanged	1,809	97924268
MAGNA3 40-100 F*	40mm Flanged	1,992	97924269
MAGNA3 40-120 F	40mm Flanged	2,280	97924270
MAGNA3 40-150 F	40mm Flanged	2,704	97924271
MAGNA3 40-180 F	40mm Flanged	3,109	97924272
MAGNA3 50-40 F**	50mm Flanged	2,411	97924280
MAGNA3 50-60 F**	50mm Flanged	2,841	97924281
MAGNA3 50-80 F	50mm Flanged	3,126	97924282
MAGNA3 50-100 F	50mm Flanged	3,309	97924283
MAGNA3 50-120 F	50mm Flanged	3,494	97924284
MAGNA3 50-150 F	50mm Flanged	4,025	97924285
MAGNA3 50-180 F	50mm Flanged	4,720	97924286

			IVIAGINAS
		230-24	0V 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA3 65-40 F	65mm Flanged	3,023	97924294
MAGNA3 65-60 F	65mm Flanged	3,453	97924295
MAGNA3 65-80 F	65mm Flanged	3,759	97924296
MAGNA3 65-100 F	65mm Flanged	3,964	97924297
MAGNA3 65-120 F	65mm Flanged	4,250	97924298
MAGNA3 65-150 F	65mm Flanged	4,476	97924299
MAGNA3 80-40 F	80mm Flanged	3,616	97924306
MAGNA3 80-60 F	80mm Flanged	3,984	97924307
MAGNA3 80-80 F	80mm Flanged	4,291	97924308
MAGNA3 80-100 F	80mm Flanged	4,289	97924309
MAGNA3 80-120 F	80mm Flanged	4,813	97924310
MAGNA3 100-40 F	100mm Flanged	4,250	97924311
MAGNA3 100-60 F	100mm Flanged	4,638	97924312
MAGNA3 100-80 F	100mm Flanged	4,607	97924313
MAGNA3 100-100 F	100mm Flanged	5,018	97924314
MAGNA3 100-120 F	100mm Flanged	5,693	97924315



TWIN HEAD MAGNA3 D VARIABLE SPEED CIRCULATORS							
		230-24	0V 1ph 50Hz				
Model	Pump Ports	£	Product Code				
MAGNA3 D 32-40	2" BSPM	1,981	97924449				
MAGNA3 D 32-60	2" BSPM	2,318	97924450				
MAGNA3 D 32-80	2" BSPM	2,418	97924451				
MAGNA3 D 32-100	2" BSPM	2,627	97924452				
MAGNA3 D 32-40F	32mm Flanged	2,183	98333840				
MAGNA3 D 32-60F	32mm Flanged	2,552	98333860				
MAGNA3 D 32-80F	32mm Flanged	2,687	98333880				
MAGNA3 D 32-100F	32mm Flanged	3,059	97924453				
MAGNA3 D 32-120 F	32mm Flanged	4,351	97924454				
MAGNA3 D 40-40F*	40mm Flanged	2,721	97924461				
MAGNA3 D 40-60F*	40mm Flanged	2,958	97924462				
MAGNA3 D 40-80 F*	40mm Flanged	3,838	97924463				
MAGNA3 D 40-100 F*	40mm Flanged	4,250	97924464				
MAGNA3 D 40-120 F	40mm Flanged	5,108	97924465				
MAGNA3 D 40-150 F	40mm Flanged	5,762	97924466				
MAGNA3 D 40-180 F	40mm Flanged	6,635	97924467				
MAGNA3 D 50-40 F**	50mm Flanged	4,754	97924475				
MAGNA3 D 50-60 F**	50mm Flanged	5,600	97924476				
MAGNA3 D 50-80 F	50mm Flanged	6,163	97924477				
MAGNA3 D 50-100 F	50mm Flanged	6,527	97924478				
MAGNA3 D 50-120 F	50mm Flanged	6,889	97924479				
MAGNA3 D 50-150 F	50mm Flanged	7,937	97924480				
MAGNA3 D 50-180 F	50mm Flanged	8,740	97924481				

			MAGNA3 D		
		230-240V 1ph 50Hz			
Model	Pump Ports	£	Product Code		
MAGNA3 D 65-40 F	65mm Flanged	5,962	97924489		
MAGNA3 D 65-60 F	65mm Flanged	6,808	97924490		
MAGNA3 D 65-80 F	65mm Flanged	6,962	97924491		
MAGNA3 D 65-100 F	65mm Flanged	7,816	97924492		
MAGNA3 D 65-120 F	65mm Flanged	7,871	97924493		
MAGNA3 D 65-150 F	65mm Flanged	8,433	97924494		
MAGNA3 D 80-40 F	80mm Flanged	7,131	97924501		
MAGNA3 D 80-60 F	80mm Flanged	6,485	97924502		
MAGNA3 D 80-80 F	80mm Flanged	6,986	97924503		
MAGNA3 D 80-100 F	80mm Flanged	8,046	97924504		
MAGNA3 D 80-120 F	80mm Flanged	9,030	97924505		
MAGNA3 D 100-40 F	100mm Flanged	6,916	97924506		
MAGNA3 D 100-60 F	100mm Flanged	7,556	97924507		
MAGNA3 D 100-80 F	100mm Flanged	8,643	97924508		
MAGNA3 D 100-100 F	100mm Flanged	9,416	97924509		
MAGNA3 D 100-120 F	100mm Flanged	10,681	97924510		



\*/\*\* Due to differences in port to port dimensions, when replacing MAGNA or UPS/D models with an indicated MAGNA3 a spacer kit may be required.

Available as 2 kits, 1 for 40mm MAGNA3 models and 1 for 50mm MAGNA3 models, each includes a suitable spacer, a set of extended bolts, nuts and 3 gaskets.

Spacer Kits MAGNA1 / MAGNA3 type	Pressure	£	Product Code	
*40mm	PN 6	75	96281076	
**50mm	PN 6	86	96281077	

# **CATEGORY 1 - MAGNA1 N and MAGNA3 N VARIABLE SPEED CIRCULATORS**

# SINGLE HEAD MAGNA1 N VARIABLE SPEED CIRCULATORS - WRAS Approved

MAGNA1 N

	_	230-240V 1ph 50Hz		
Model	Pump Ports	£	Product Code	
MAGNA1 25-40N	1½" BSPM	980	99221223	
MAGNA1 25-60N	1½" BSPM	1,165	99221224	
MAGNA1 25-80N	1½" BSPM	1,325	99221225	
MAGNA1 25-100N	1½" BSPM	1,467	99221226	
MAGNA1 25-120N	1½" BSPM	1,651	99221227	
MAGNA1 32-40N	2" BSPM	1,205	99221253	
MAGNA1 32-60N	2" BSPM	1,410	99221254	
MAGNA1 32-80N	2" BSPM	1,467	99221255	
MAGNA1 32-100N	2" BSPM	1,611	99221256	
MAGNA1 32-40FN	32mm Flanged	1,327	99221265	
MAGNA1 32-60FN	32mm Flanged	1,553	99221271	
MAGNA1 32-80FN	32mm Flanged	1,631	99221277	
MAGNA1 32-100FN	32mm Flanged	1,876	99221257	
MAGNA1 32-120FN	32mm Flanged	2,483	99221289	
MAGNA1 40-40FN	40mm Flanged	1,655	99221299	
MAGNA1 40-60FN	40mm Flanged	1,815	99221300	
MAGNA1 40-80FN	40mm Flanged	2,483	99221323	
MAGNA1 40-100FN	40mm Flanged	2,739	99221324	
MAGNA1 40-120FN	40mm Flanged	3,042	99221325	
MAGNA1 40-150FN	40mm Flanged	3,713	99221326	
MAGNA1 40-180FN	40mm Flanged	4,272	99221327	

		230-24	0V 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA1 50-60FN	50mm Flanged	3,227	99221358
MAGNA1 50-80FN	50mm Flanged	3,551	99221359
MAGNA1 50-100FN	50mm Flanged	3,760	99221360
MAGNA1 50-120FN	50mm Flanged	3,969	99221361
MAGNA1 50-150FN	50mm Flanged	4,573	99221362
MAGNA1 50-180FN	50mm Flanged	5,361	99221363
MAGNA1 65-40FN	65mm Flanged	3,435	99221394
MAGNA1 65-60FN	65mm Flanged	3,923	99221395
MAGNA1 65-80FN	65mm Flanged	4,272	99221396
MAGNA1 65-100FN	65mm Flanged	4,503	99221397
MAGNA1 65-120FN	65mm Flanged	4,828	99221398
MAGNA1 65-150FN	65mm Flanged	5,568	99221399



# SINGLE HEAD MAGNA3 N VARIABLE SPEED CIRCULATORS - WRAS Approved

MAGNA3 N

	_	230-240V 1ph 50Hz			
Model	Pump Ports	£	Product Code		
MAGNA3 25-40N	1½" BSPM	1,074	97924336		
MAGNA3 25-60N	1½" BSPM	1,313	97924337		
MAGNA3 25-80N	1½" BSPM	1,457	97924338		
MAGNA3 25-100N	1½" BSPM	1,597	97924339		
MAGNA3 25-120N	1½" BSPM	1,797	97924340		
MAGNA3 32-40N	2" BSPM	1,319	97924341		
MAGNA3 32-60N	2" BSPM	1,542	97924342		
MAGNA3 32-80N	2" BSPM	1,613	97924343		
MAGNA3 32-100N	2" BSPM	1,752	97924344		
MAGNA3 32-40FN	32mm Flanged	1,452	98333836		
MAGNA3 32-60FN	32mm Flanged	1,699	98333856		
MAGNA3 32-80FN	32mm Flanged	1,792	98333876		
MAGNA3 32-100FN	32mm Flanged	2,041	97924345		
MAGNA3 32-120FN	32mm Flanged	3,420	97924346		
MAGNA3 40-40FN	40mm Flanged	1,811	97924347		
MAGNA3 40-60FN	40mm Flanged	2,102	97924348		
MAGNA3 40-80FN	40mm Flanged	3,388	97924349		
MAGNA3 40-100FN	40mm Flanged	3,737	97924350		
MAGNA3 40-120FN	40mm Flanged	4,118	97924351		
MAGNA3 40-150FN	40mm Flanged	5,067	97924352		
MAGNA3 40-180FN	40mm Flanged	5,173	97924353		

Stainless stee	pumps for	HWS circulation.
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	_	230-24	0V 1ph 50Hz
Model	Pump Ports	£	Product Code
MAGNA3 50-40FN	50mm Flanged	3,737	97924354
MAGNA3 50-60FN	50mm Flanged	4,402	97924355
MAGNA3 50-80FN	50mm Flanged	4,845	97924356
MAGNA3 50-100FN	50mm Flanged	5,130	97924357
MAGNA3 50-120FN	50mm Flanged	5,415	97924358
MAGNA3 50-150FN	50mm Flanged	6,238	97924359
MAGNA3 50-180FN	50mm Flanged	7,315	97924360
MAGNA3 65-40FN	65mm Flanged	4,688	97924361
MAGNA3 65-60FN	65mm Flanged	5,352	97924362
MAGNA3 65-80FN	65mm Flanged	5,828	97924363
MAGNA3 65-100FN	65mm Flanged	6,143	97924364
MAGNA3 65-120FN	65mm Flanged	6,587	97924365
MAGNA3 65-150FN	65mm Flanged	6,967	97924366





### STAINLESS STEEL PUMPS COMPLETE WITH 2 POLES ELECTRIC MOTOR 230V 1ph 50Hz 380-415V 3ph 50Hz Pipework P2 ΡN Design Optional **Product Code Product Code** £ £ kW A O I BQQE A O I BQQE Model bar Connection series baseplate TP 25-50/2 R S\*\* 0.12 1452 98346632 1,358 98346612 10 1"½ BSPM 100 N/A TP 25-80/2 R S\*\* 10 1"1/2 BSPM 100 1619 98282100 1,524 0.18 N/A TP 32-50/2 R S\*\* 10 2" BSPM 1816 98282162 98346615 0.12 100 N/A 1,717 TP 32-80/2 R S\*\* 0.25 10 2" BSPM 100 2044 98346642 1,830 98346623 N/A TP 32-90/2 R S\*\* 0.37 10 2" BSPM 100 2200 98282352 98346629 N/A 1,986 A F I BQQE A F I BQQE TP 40-50/2 S 0.12 6/10 40mm Flanged 100 2.181 98282357 2.082 98346618 N/A TP 40-80/2 S 0.25 6/10 40mm Flanged 100 N/A 2.588 98346645 2.373 98346626 **BRONZE PUMPS COMPLETE WITH 2 POLES ELECTRIC MOTOR** ΡN Optional 230V 1ph 50Hz 380-415V 3ph 50Hz kW A F Z BQQE A F Z BQQE Model bar Connection series baseplate TP 32-60/2 B 0.25 6/10 32mm Flanged 200 2229.00 98957950 2,025 98436290 В1 32mm Flanged TP 32-120/2 B 0.37 6/10 200 2743.00 98957952 2,538 98154622 TP 32-150/2 B 0.37 6/10 32mm Flanged 200 В1 2743.00 98958115 98283542 2,538 TP 32-180/2 B 0.55 6/10 200 3061.00 98958117 98958118 32mm Flanged В1 2,857 TP 32-230/2 B 0.75 6/10 32mm Flanged 200 3406.00 98958119 3,182 98938754 В1 TP 40-60/2 B 2511.00 0.25 6/10 40mm Flanged 200 В1 98957961 2,306 98178430 TP 40-120/2 B 0.37 6/10 40mm Flanged 200 В1 3078.00 98957964 2.873 97822677 TP 40-180/2 B 0.55 6/10 40mm Flanged 200 B1 3591.00 98957966 3.387 97846836 TP 40-190/2 B 0.75 16 40mm Flanged 200 R1 3719.00 98958126 3.494 98349467 TP 40-230/2 B 1.1 16 40mm Flanged 200 В1 3822.00 98958127 3,598 98391065 TP 40-270/2 B 1.5 16 40mm Flanged 200 В1 4142.00 98958129 3,916 98958130 50mm Flanged TP 50-60/2 B 0.37 6/10 200 В1 3080.00 98957980 2,876 97958920 TP 50-120/2 B 0.75 6/10 50mm Flanged 200 В1 3731.00 98957983 3,507 97955265 TP 50-180/2 B 0.75 6/10 50mm Flanged 200 В1 4168.00 98610035 3.943 97959461 TP 65-60/2 B 3806.00 98958001 98165472 0.55 6/10 65mm Flanged 200 В1 3,510 TP 65-120/2 B 4617.00 98400979 1.1 6/10 65mm Flanged 200 В1 98958004 4.391 TP 65-180/2 B 1.5 6/10 65mm Flanged 200 В1 4993.00 98589719 4,770 98165513 AI F Z BQQE AI F Z BQQE TP 80-120/2 B 1.5 6 80mm Flanged 200 В2 5,749 98958078 5,524 98958079 A F Z BQQE A F Z BQQE TP 100-120/2 B 2.2 10 100mm Flanged 200 В2 7,245 98334678 **BRONZE PUMPS COMPLETE WITH 4 POLES ELECTRIC MOTOR** Optional 230V 1ph 50Hz 380-415V 3ph 50Hz PN Pipework Design A F Z BQQE A F Z BQQE Model kW bar Connection series baseplate TP 32-30/4 B 6/10 32mm Flanged 1,995 98957946 1,899 97952248 0.12 200 В1 TP 32-40/4 B 32mm Flanged 200 2,511 98958136 2.306 97909716 0.25 6/10 В1 TP 32-60/4 B 32mm Flanged 98958138 98958183 0.25 6/10 200 В1 2,564 2,359 TP 40-30/4 B 40mm Flanged 2,352 98957956 98122047 0.12 6/10 200 В1 2,258 TP 40-60/4 B 0.25 6/10 40mm Flanged 200 В1 2.973 98957958 2.769 97968358 TP 40-90/4 B 0.25 16 40mm Flanged 200 B1 2,983 98958142 2.779 98505215 TP 50-30/4 B 0.25 6/10 50mm Flanged 200 В1 3,015 98957970 2,811 98957971 TP 50-60/4 B 0.37 6/10 50mm Flanged 200 В1 3,653 98957975 3,449 97896631 6/10 3,712 TP 65-30/4 B 0.25 65mm Flanged 200 B2 98957991 3,507 98957993 TP 65-60/4 B 0.55 6/10 65mm Flanged 200 B2 98957999 97897722 4,382 4.177 AI F Z BQQE AI F Z BQQE TP 80-30/4 B 0.37 80mm Flanged 200 В2 4,889 98958073 4,684 98958075 6 TP 80-60/4 B 0.75 6 80mm Flanged 200 B2 5,562 98958076 5,339 98585195

CATEGORY 1 - TP SINGLE STAGE SINGLE HEAD IN-LINE PUMPS FOR HOT WATER SERVICE

### PUMPS

TP 100-30/4 B

Standard fixed speed TP pump casings are Stainless steel (S) or Bronze (B) for circulating water in HWS Secondary systems.

100mm Flanged

The appropriate pipe work Unions or Flanges are supplied separately to the

pump units and codes and prices for these accessories can be found on page 31.

6

TP pumps marked \*\* are suitable for use with 1" or 1" 1/4 brass unions -- details of which are on page 4.

Custom Built pump options; different seals, elastomers, 60Hz motors etc can be configured and priced on request by your Sales Office.

200

### **ELECTRIC MOTOR**

220-230/240V 1ph 50Hz or 240V 1ph 50Hz 220-240D/380-415Y V/3ph/50Hz IP55 Class F insulation

0.55

3ph motors 0.75kW and above are IE3 Efficiency

### **BASEPLATES**

When applicable, baseplates for TP(E)(D) are available as an accessory. See page 31 for codes and prices.



98958080



98958082

6,272

B2

6,485

# CATEGORY 1 - TPE3 SINGLE STAGE IN LINE PUMPS FOR HOT WATER SERVICE

### STAINLESS STEEL SINGLE HEAD PUMPS COMPLETE WITH VARIABLE SPEED HIGH EFFICIENCY MOTOR AND BUILT-IN DP+T SENSOR

			2	30V 1ph 50Hz	380-500	√ 3ph 50Hz	
	P2	PN	Pipework	£	Product Code	£	Product Code
Model	kW	bar	Connection		A F I BQQE	AF	BQQE
TPE3 32-80-S	0.25	6/10	32mm Flanged	4,606	98416353	4,973	98416384
TPE3 32-120-S	0.25	6/10	32mm Flanged	4,973	98416354	5,341	98416385
TPE3 32-150-S	0.37	6/10	32mm Flanged	5,282	98416355	5,624	98416386
TPE3 32-180-S	0.55	6/10	32mm Flanged	5,601	98416356	5,920	98416387
TPE3 32-200-S	0.75	6/10	32mm Flanged	5,845	98416357	6,137	98416388
TPE3 40-80-S	0.25	6/10	40mm Flanged	5,257	98416504	5,624	98416542
TPE3 40-120-S	0.37	6/10	40mm Flanged	5,577	98416505	5,920	98416543
TPE3 40-150-S	0.55	6/10	40mm Flanged	5,915	98416506	6,235	98416544
TPE3 40-180-S	0.75	6/10	40mm Flanged	6,268	98416507	6,560	98416545
TPE3 40-200-S	1.1	6/10	40mm Flanged	6,530	98416508	6,806	98416546
TPE3 40-240-S	1.5	6/10	40mm Flanged	7,006	98416509	7,263	98416547
TPE3 50-60-S	0.37	6/10	50mm Flanged	5,479	98416672	5,821	98416717
TPE3 50-80-S	0.37	6/10	50mm Flanged	5,793	98416673	6,137	98416718
TPE3 50-120-S	0.55	6/10	50mm Flanged	6,142	98416674	6,462	98416719
TPE3 50-150-S	0.75	6/10	50mm Flanged	6,514	98416675	6,806	98416720
TPE3 50-180-S	1.1	6/10	50mm Flanged	6,892	98416676	7,168	98416721
TPE3 50-200-S	1.5	6/10	50mm Flanged	7,293	98416677	7,548	98416722
TPE3 50-240-S	2.2	6/10	50mm Flanged		-	7,940	98416723
TPE3 65-60-S	0.37	6/10	65mm Flanged	6,121	98416833	6,462	98416873
TPE3 65-80-S	0.55	6/10	65mm Flanged	6,488	98416834	6,806	98416874
TPE3 65-120-S	0.75	6/10	65mm Flanged	6,875	98416835	7,168	98416875
TPE3 65-150-S	1.1	6/10	65mm Flanged	7,273		7,548	98416876
TPE3 65-180-S	1.5	6/10	65mm Flanged	7,684	98416837	7,940	98416877
TPE3 65-200-S	2.2	6/10	65mm Flanged		-	8,357	98416878

### **TPE3 PUMPS**

All above TPE3 have stanless steel casing for circulating water in HWS Secondary systems.

TPE3 pumps have a built-in differential pressure and temperature transducer and are pre-programmed for close loop control.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency IP55 Class F insulation

# IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details. This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES

Baseplates are not available for TPE3 single head pumps.





### **CATEGORY 1 - TP SINGLE STAGE SINGLE HEAD IN LINE PUMPS** CAST IRON PUMPS COMPLETE WITH 4 POLES ELECTRIC MOTOR 230V 1ph 50Hz 380-415V 3ph 50Hz Pipework Р2 ΡN Design Optional **Product Code Product Code** £ £ kW baseplate A F A BQQE A F A BQQE Model baı Connection series TP 32-30/4 0.12 6/10 1,129 1,034 98957943 32mm Flanged 200 В1 98957942 TP 32-40/4 32mm Flanged 200 В1 1,460 1,256 98958179 0.25 6/10 98958135 0.25 6/10 TP 32-60/4 32mm Flanged 200 В1 1,488 1,281 98958182 98958137 TP 32-80/4 0.25 16 32mm Flanged 300 ВЗ 2,027 96384199 1,822 96086739 TP 32-100/4 0.37 32mm Flanged 300 1,858 96086740 16 В3 2,062 96384205 TP 32-120/4 0.55 16 32mm Flanged 300 В3 2.124 96384211 1.920 96086741 TP 40-30/4 0.12 6/10 200 В1 40mm Flanged 1.314 98957953 1.220 98896273 TP 40-60/4 0.25 6/10 40mm Flanged 200 В1 1,702 98857066 1,496 98119685 TP 40-90/4 0.25 16 40mm Flanged 200 В1 1,705 98958141 1.499 98462889 0.55 TP 40-100/4 16 ВЗ 96384229 2,088 96086883 40mm Flanged 300 2,294 TP 40-110/4 0.75 16 40mm Flanged 300 В3 2,361 98760171 2,138 98743357 TP 40-140/4 16 40mm Flanged 300 ВЗ 2,700 98760159 98743317 1.1 2,476 98957967 98794577 TP 50-30/4 0.25 6/10 50mm Flanged 200 В1 1,724 1,520 50mm Flanged TP 50-60/4 0.37 В1 98957972 98957974 6/10 200 2.057 1.851 TP 50-90/4 0.55 2.245 96087117 16 50mm Flanged 300 В3 2.450 96384247 TP 50-80/4 0.75 16 50mm Flanged 300 B3 2.710 98760147 2.486 98742972 TP 50-120/4 1 1 16 50mm Flanged 300 R3 2.755 98760135 2.531 98742942 TP 50-140/4 1.5 16 50mm Flanged 300 В3 2,798 98760123 2,573 98742912 TP 50-190/4 2.2 16 50mm Flanged 300 В3 2,671 96087289 TP 50-230/4 3 16 50mm Flanged 300 В3 2,918 96087290 TP 65-30/4 0.25 6/10 65mm Flanged В2 2,086 200 98957986 1,880 98436173 TP 65-60/4 0.55 6/10 65mm Flanged 200 B2 2.436 2,232 98923198 98957994 TP 65-90/4 0.75 16 65mm Flanged 300 ВЗ 2,750 2,524 96087441 96384283 TP 65-110/4 96087442 1.1 300 В3 2,847 2,622 16 65mm Flanged 96384289 TP 65-130/4 2,993 65mm Flanged 96087443 1.5 16 300 В3 96384295 2.769 TP 65-150/4 2.2 16 65mm Flanged 300 В3 3.003 96087627 TP 65-170/4 3 16 65mm Flanged 300 ВЗ 3,134 96087628 TP 65-240/4 4 16 65mm Flanged 300 В3 3,598 96087629 ALF A BOOE ALF A BOOE 80mm Flanged TP 80-30/4 0.37 6 200 B2 2,700 98958007 2,495 98958011 0.75 80mm Flanged B2 98958022 TP 80-60/4 6 200 3,061 2,836 98958026 A F A BQQE A F A BQQE TP 80-70/4 1.1 16 80mm Flanged 300 В3 2,896 96384301 2,671 96108601 TP 80-90/4 80mm Flanged 300 ВЗ 3,043 2,817 96108602 1.5 16 96384307 TP 80-110/4 2.2 300 В3 96108849 16 80mm Flanged 3,059 3 TP 80-150/4 80mm Flanged 16 300 ВЗ 96108850 3,205 TP 80-170/4 4 4,031 96108851 16 80mm Flanged 300 В3 TP 80-240/4 96108852 5.5 16 80mm Flanged 300 В4 4.617 TP 80-270/4 7.5 16 80mm Flanged 300 B4 4.977 96108853 TP 80-340/4 11 16 80mm Flanged 300 Included 6,220 96108854 AI F A BOOE AI F A BOOE 3,541 TP 100-30/4 0.55 6 100mm Flanged 200 B2 98958042 3,327 98873387 A F A BQQE A F A BOOE TP 100-65/4 1.1 16 100mm Flanged 300 В4 3,761 3,536 99476439 99476455 100mm Flanged TP 100-70/4 В4 1.5 16 300 3,845 96384313 3,621 96109053 2.2 В4 TP 100-90/4 16 100mm Flanged 300 3,926 96109303 TP 100-110/4 100mm Flanged 300 В4 4,180 96109304 3 16 4 100mm Flanged 96109305 TP 100-130/4 В4 4,691 16 300 TP 100-170/4 5.5 16 100mm Flanged 300 В4 5.312 96109306 7.5 TP 100-200/4 В4 16 100mm Flanged 300 5,905 96109307 TP 100-250/4 11 16 100mm Flanged 300 Included 7.288 96109308 TP 100-330/4 15 16 100mm Flanged 300 Included 8.254 96109309 TP 100-370/4 18 5 16 100mm Flanged 300 Included 9.649 96109310 TP 100-410/4 22 16 100mm Flanged 300 Included 10,775 96109311 TP 125-60/4 2.2 16 125mm Flanged 300 N/A 3,969 98908162 16 125mm Flanged N/A 4,398 TP 125-80/4 3 300 98908136 TP 125-95/4 16 125mm Flanged 300 N/A 5,039 98915576 TP 125-110/4 4 16 125mm Flanged 300 В4 5,098 99366098 TP 125-130/4 5.5 16 125mm Flanged 300 В4 5,475 96109540 7,246 96109541 TP 125-160/4 7.5 125mm Flanged 300 В4 16 98743727 TP 125-190/4 11 16 125mm Flanged 300 Included 7,824 TP 125-230/4 15 300 8.629 98743685 16 125mm Flanged Included TP 125-300/4 18.5 125mm Flanged 16 300 Included 9,972 98742584 TP 125-340/4 22 16 125mm Flanged 300 Included 11.045 98742560 TP 125-400/4 30 16 125mm Flanged 300 Included 12,115 98742536

### CAST IRON PUMPS COMPLETE WITH 4 POLES ELECTRIC MOTOR 380-415V 3ph 50Hz Р2 ΡN Pipework Design Optional **Product Code** kW baseplate A F A BQQE Model baı Connection series TP 150-70/4 150mm Flanged 6,109 98908308 5.5 16 300 N/A TP 150-110/4 150mm Flanged 300 N/A 7,941 98908287 7.5 16 TP 150-155/4 11 150mm Flanged 300 N/A 8,833 98908267 16 TP 150-170/4 150mm Flanged N/A 15 16 300 9,516 98908236 TP 150-130/4 7.5 16 150mm Flanged 300 В4 8,052 96109869 TP 150-160/4 150mm Flanged 11 Included 96109870 16 300 8,898 TP 150-200/4 15 16 150mm Flanged 300 Included 9.701 96109871 TP 150-220/4 18.5 16 150mm Flanged 300 Included 10.830 96109872 TP 150-260/4 18.5 16 150mm Flanged 300 N/A 11.582 96306153 TP 150-250/4 22 16 150mm Flanged 300 Included 11.690 96109873 TP 150-280/4 22 16 150mm Flanged 300 N/A 12.278 96306152 150mm Flanged TP 150-340/4 30 16 300 N/A 13,901 96306151 150mm Flanged TP 150-390/4 N/A 96306150 37 16 300 16,215 45 150mm Flanged TP 150-450/4 300 N/A 19,139 97927149 TP 150-520/4 55 16 150mm Flanged 300 N/A POA 97927148 TP 150-660/4 75 POA 97927147 16 150mm Flanged 300 N/A TP 200-50/4 4 200mm Flanged 300 97927154 16 N/A 6.826 5.5 200mm Flanged TP 200-70/4 7,547 97927153 16 300 N/A TP 200-90/4 7.5 16 200mm Flanged 300 N/A 9.265 97927152 TP 200-130/4 11 16 200mm Flanged 300 N/A 10.889 97927151 TP 200-150/4 15 16 200mm Flanged 300 N/A 11.312 97927150 200mm Flanged TP 200-160/4 15 16 300 N/A 11,312 97927159 TP 200-190/4 18.5 16 200mm Flanged 300 N/A 11.576 97927158 TP 200-200/4 22 16 200mm Flanged 300 N/A 12,346 97927157 TP 200-240/4 30 200mm Flanged N/A 15,316 97927156 16 300 200mm Flanged TP 200-290/4 16 300 N/A 18,446 97927155 TP 200-330/4 37 16 200mm Flanged 300 N/A 18,996 96306170 96306158 TP 200-270/4 45 200mm Flanged 300 N/A 19,462 16 TP 200-360/4 45 200mm Flanged 300 N/A POA 96306169 16 TP 200-320/4 55 200mm Flanged N/A 96306157 16 300 POA TP 200-400/4 55 200mm Flanged N/A 96306168 16 300 POA TP 200-410/4 75 16 200mm Flanged 300 N/A POA 96306156 TP 200-470/4 75 16 200mm Flanged 300 N/A POA 96306167 TP 200-530/4 90 16 200mm Flanged 300 N/A POA 96306166 200mm Flanged TP 200-590/4 110 300 N/A POA 96306165 16 TP 200-660/4 132 16 200mm Flanged 300 N/A POA 96306164 A F O BOOE TP 300-190/4 30 16 POA 300mm Flanged 300 N/A 99087574 TP 300-220/4 37 16 300mm Flanged 300 N/A POA 99087573 TP 300-250/4 45 16 300mm Flanged 300 N/A POA 99087572 TP 300-290/4 55 300mm Flanged 300 N/A 99087571 16 POA TP 300-390/4 75 300mm Flanged N/A 16 300 POA 99087570 TP 300-420/4 90 300mm Flanged 300 N/A POA 99087569 16 TP 300-430/4 110 16 300mm Flanged 300 N/A POA 99087568 TP 300-500/4 132 16 300mm Flanged 300 N/A POA 99087567 300mm Flanged TP 300-550/4 160 16 300 N/A POA 99087566 TP 350-280/4 75 16 350mm Flanged 300 N/A POA 99087582 350mm Flanged TP 350-320/4 90 16 300 N/A POA 99087581 TP 350-360/4 110 16 350mm Flanged 300 N/A POA 99087580 350mm Flanged TP 350-420/4 N/A 132 16 300 POA 99087579 TP 350-480/4 16 160 350mm Flanged 300 N/A POA 99087578 TP 350-530/4 200 350mm Flanged 300 N/A POA 99087577 16 POA 99087576 TP 350-650/4 250 350mm Flanged N/A 16 300 TP 350-780/4 315 16 350mm Flanged 300 N/A POA 99087575 CAST IRON PUMPS COMPLETE WITH 6 POLES ELECTRIC MOTOR 380-415V 3ph 50Hz P2 PN Pipework Design Optional Model kW bai Connection series baseplate A F A BOOE TP 125-60/6 1.5 16 125mm Flanged 300 R4 4.561 96109647 TP 125-70/6 2.2 16 125mm Flanged 300 В4 4,831 96109648 125mm Flanged TP 125-80/6 3 16 300 В4 5,635 98743793 125mm Flanged TP 125-100/6 4 16 В4 6,172 98743769 300 TP 125-130/6 5.5 125mm Flanged 300 В4 6,978 98742650 16 В4 TP 125-160/6 16 125mm Flanged 300 9,126 98742626 TP 150-60/6 2.2 16 150mm Flanged 300 В4 5,312 96109937 TP 150-70/6 6,120 3 16 150mm Flanged 300 В4 96109994 TP 150-90/6 150mm Flanged 6,709 4 16 300 В4 96109995 TP 150-110/6 5.5 150mm Flanged 300 В4 7.515 96109996 16

**CATEGORY 1 - TP SINGLE STAGE SINGLE HEAD IN LINE PUMPS** 



### CATEGORY 1 - TP SINGLE STAGE SINGLE HEAD IN LINE PUMPS CAST IRON PUMPS COMPLETE WITH 2 POLES ELECTRIC MOTOR 230V 1ph 50Hz 380-415V 3ph 50Hz P2 ΡN Product Code Product Code Pipework Design Optional A O A BQQE A O A BQQE kW Model bar Connection series baseplate TP 25-50/2 R \*\* 98346587 822 98281476 0.12 10 1"1/2 BSPM 100 N/A 727 TP 25-80/2 R \*\* 0.18 10 1"½ BSPM 100 N/A 907 98346596 813 98282096 TP 25-90/2 R \*\* 0.37 10 1"1/2 BSPM 100 N/A 98346604 891 98282133 1,097 TP 32-50/2 R \*\* 0.12 10 2" BSPM 100 N/A 1,012 98346590 912 98282120 TP 32-80/2 R \*\* 0.25 10 2" BSPM 100 N/A 98346599 970 98282166 1,186 TP 32-90/2 R \*\* 0.37 10 2" BSPM 100 N/A 1,267 98299122 1,052 98346582 A F A BOOE A F A BOOE 32mm Flanged TP 32-60/2 0.25 6/10 200 В1 1,305 98957947 1,099 98946132 TP 32-120/2 0.25 6/10 32mm Flanged 200 В1 1,581 98602057 1,376 98464186 TP 32-150/2 0.37 6/10 32mm Flanged 200 В1 1,581 98958114 1,376 97897469 32mm Flanged TP 32-180/2 0.55 200 В1 1,748 98958116 6/10 1,541 98592079 TP 32-230/2 0.75 6/10 32mm Flanged 200 В1 1,936 98841196 1,711 98278909 TP 32-200/2 1.1 16 32mm Flanged 300 ВЗ 2,118 96384217 1,894 96086673 32mm Flanged TP 32-250/2 1.5 16 300 В3 2,336 96384223 2.111 96086674 TP 32-320/2 2.2 16 32mm Flanged 300 ВЗ 2,283 96086777 TP 32-380/2 32mm Flanged 96086778 3 16 300 ВЗ 2,476 TP 32-460/2 4 16 32mm Flanged 300 В3 2,551 96086779 TP 32-580/2 5.5 16 32mm Flanged 300 ВЗ 3,156 96086780 TP 40-50/2 0.12 6/10 40mm Flanged 100 N/A 1,200 98346593 1,102 98282356 TP 40-80/2 0.25 6/10 40mm Flanged 100 N/A 1,466 98282358 1,252 98346578 TP 40-90/2 0.37 6/10 40mm Flanged 100 N/A 1,548 98346609 1,334 98282359 TP 40-60/2 0.25 6/10 40mm Flanged 200 R1 1.460 98957960 1.256 98122409 TP 40-120/2 0.37 6/10 40mm Flanged 200 В1 1,757 98957962 1,552 97851334 TP 40-180/2 0.55 40mm Flanged 2,025 98957965 6/10 200 В1 1,818 98133671 TP 40-190/2 0.75 40mm Flanged 200 В1 2,098 98958125 1,874 98294231 16 1,929 98066916 TP 40-230/2 1.1 16 40mm Flanged 200 В1 98617267 2,153 TP 40-270/2 1.5 16 40mm Flanged 200 B1 2,320 98958128 2,095 98133646 TP 40-240/2 2.2 16 40mm Flanged 300 ВЗ 2.427 96086923 TP 40-300/2 16 40mm Flanged 300 ВЗ 2,573 96086924 TP 40-360/2 4 16 40mm Flanged 300 ВЗ 2.915 96086925 40mm Flanged 98743275 TP 40-430/2 5.5 В3 16 300 3.787 TP 40-530/2 7.5 16 300 40mm Flanged **B3** 4.031 98743233 TP 40-630/2 11 16 40mm Flanged 300 Included 5,793 98743200 50mm Flanged TP 50-60/2 0.37 6/10 200 В1 1,757 98957977 1,552 98182027 TP 50-120/2 0.75 6/10 50mm Flanged 200 В1 2,106 98810439 1.880 98279255 TP 50-180/2 0.75 6/10 50mm Flanged 200 В1 2.334 98179119 2.108 98133648 TP 50-160/2 96086995 1.1 16 50mm Flanged 300 В3 2.379 96384271 2.153 TP 50-190/2 1.5 16 50mm Flanged 300 ВЗ 2,557 96384277 2,334 96086996 50mm Flanged TP 50-240/2 16 300 В3 2,436 96087195 TP 50-290/2 16 50mm Flanged 300 В3 2.599 96087196 TP 50-360/2 4 ВЗ 16 50mm Flanged 300 2.987 96087197 TP 50-430/2 5.5 16 50mm Flanged 300 В3 3.952 96087198 TP 50-420/2 7.5 16 50mm Flanged 300 В3 4,128 98742870 TP 50-540/2 11 16 50mm Flanged 300 Included 5,895 98742818 15 50mm Flanged TP 50-630/2 16 300 Included 6,234 98742776 TP 50-710/2 15 16 50mm Flanged 300 Included 6,234 96087201 TP 50-830/2 18.5 50mm Flanged 16 300 Included 7,739 96087202 50mm Flanged 96087203 TP 50-900/2 22 16 300 Included 8.856 TP 65-60/2 0.55 6/10 65mm Flanged 200 В1 2,180 98830723 1,883 98509608 TP 65-120/2 98830721 6/10 65mm Flanged 200 В1 2,567 2,343 98585759 TP 65-180/2 1.5 6/10 65mm Flanged 200 В1 2,766 98929072 2,541 98420371 65mm Flanged TP 65-170/2 2.2 16 300 В3 2.446 98742433 65mm Flanged TP 65-210/2 3 16 300 B3 2,622 98742391 TP 65-250/2 Δ 16 65mm Flanged 300 ВЗ 3,003 98742352 65mm Flanged TP 65-340/2 5.5 16 300 ВЗ 96087524 4,031 TP 65-410/2 7.5 16 65mm Flanged 300 ВЗ 4,226 96087525 TP 65-460/2 11 65mm Flanged 300 5,992 96087526 16 Included 65mm Flanged TP 65-550/2 15 16 300 Included 7.011 96087527 TP 65-660/2 18 5 16 65mm Flanged 300 Included 8.274 96087528 TP 65-720/2 22 16 65mm Flanged 300 Included 9,210 96087529 TP 65-930/2 30 16 65mm Flanged 300 10,675 96087530 Included



### CAST IRON PUMPS COMPLETE WITH 2 POLES ELECTRIC MOTOR 230V 1ph 50Hz 380-415V 3ph 50Hz P2 PΝ Pipework Design Optional **Product Code** Product Code AI F A BQQE AI F A BQQE Model kW Connection bar series baseplate TP 80-120/2 98958035 98843904 1.5 6 80mm Flanged 200 B2 3,159 2.934 A F A BQQE A F A BQQE TP 80-140/2 2.2 16 80mm Flanged 300 В3 2,573 96108717 TP 80-180/2 80mm Flanged 300 ВЗ 2,817 96108718 16 TP 80-210/2 4 80mm Flanged 300 ВЗ 96108719 16 3,161 TP 80-240/2 5.5 16 80mm Flanged 300 ВЗ 96108720 3,338 TP 80-250/2 7.5 16 80mm Flanged 300 ВЗ 4,324 96108721 TP 80-330/2 11 16 80mm Flanged 300 Included 6.137 96108722 TP 80-400/2 15 16 80mm Flanged 300 Included 6,155 96108723 TP 80-520/2 18.5 80mm Flanged 16 300 Included 7,662 96108724 TP 80-570/2 22 16 80mm Flanged 300 Included 9,536 96108725 30 80mm Flanged TP 80-700/2 16 300 Included 10,823 96108726 AI F A BQQE AI F A BQQE TP 100-120/2 2.2 100mm Flanged 200 98958092 6 B2 3.833 A F A BQQE A F A BQQE TP 100-160/2 4 16 100mm Flanged 300 В3 2,997 96109189 TP 100-200/2 5.5 16 100mm Flanged 300 ВЗ 3,771 96109190 TP 100-240/2 7.5 100mm Flanged 3,926 96109191 16 300 ВЗ TP 100-250/2 11 16 100mm Flanged 300 Included 6,330 96109192 TP 100-310/2 15 16 100mm Flanged 300 Included 7,109 96109193 TP 100-360/2 18.5 16 100mm Flanged 300 Included 8,566 96109194 TP 100-390/2 22 16 100mm Flanged 300 Included 9,730 96109195 TP 100-480/2 30 16 300 10,993 96109196 100mm Flanged Included TP 125-310/2 22 16 300 8.693 125mm Flanged Included 99128261 TP 125-360/2 30 16 125mm Flanged 300 Included 10,540 99128258

### **PUMPS**

High % Glycol pumps may need an oversized motor and will need configuration by your Sales Office.

**CATEGORY 1 - TP SINGLE STAGE SINGLE HEAD IN LINE PUMPS** 

Custom Built pump options: different seals, elastomers, voltage, 60Hz motors or WRAS approved models (when available) can be configured by your Sales Office.

Some models are available in PN25. Contact the Sales Office for details.

Pumps marked \*\* are suitable for use with 1" or 1" 1/4 brass unions -- details of which are on page 4.

### **ELECTRIC MOTOR**

1ph: 220-230/240V/50Hz or 240V/50Hz

3ph up to and including 1.50kW: 220-240D/380-415Y/50Hz

3ph from 2.2kW and above: 380-415D/50Hz

IP55 Class F insulation

Motors 0.75kW and above are IE3 Efficiency.

### BASEPLATES

When applicable, baseplates for TP(E)(D) are available as an accessory. See page 31 for codes and prices.





### CATEGORY 1 - TPD SINGLE STAGE TWIN HEAD IN LINE PUMPS CAST IRON PUMPS COMPLETE WITH 4 POLES ELECTRIC MOTOR 230V 1ph 50Hz 380-415V 3ph 50Hz P2 PN Pipework Design Optional Product Code **Product Code** A F A BOOF Model kW bar Connection series baseplate A F A BOOF 32mm Flanged TPD 32-30/4 0.12 6/10 200 2,167 1,979 N/A 98957944 98957945 TPD 32-40/4 0.25 6/10 32mm Flanged 200 N/A 2,798 98958139 2,391 98958184 TPD 32-60/4 0.25 6/10 32mm Flanged 200 N/A 2,443 98958180 2,850 98958140 TPD 32-80/4 0.25 4.017 96384202 3.610 96086757 16 32mm Flanged 300 R5 TPD 32-100/4 0.37 16 32mm Flanged 300 B5 4,090 96384208 3,682 96086758 32mm Flanged TPD 32-120/4 0.55 16 300 B5 4,210 96384214 3,803 96086759 TPD 40-30/4 0.12 6/10 40mm Flanged 200 N/A 2,515 98957954 2.326 98957955 40mm Flanged TPD 40-90/4 0.25 200 N/A 3.263 98958143 2,857 98958181 16 TPD 40-100/4 0.55 16 40mm Flanged 300 B5 4.542 96384232 4.135 96086901 TPD 40-110/4 0.75 16 40mm Flanged 300 B5 4,503 98760141 4,061 98743363 TPD 40-140/4 40mm Flanged 1.1 16 300 В5 5,146 98760138 4,705 98743333 TPD 50-30/4 0.25 6/10 50mm Flanged 200 N/A 3.298 98957968 2.892 98957969 TPD 50-60/4 0.37 6/10 50mm Flanged 200 N/A 3,930 98958087 3,524 98958089 TPD 50-90/4 0.55 16 50mm Flanged 300 В5 4,847 96384250 4,441 96087153 TPD 50-80/4 0.75 16 50mm Flanged 300 В5 5,166 98760132 4,724 98742978 TPD 50-120/4 1.1 16 50mm Flanged 300 В5 98760129 4,807 98742948 5,251 50mm Flanged В5 TPD 50-140/4 5,332 98760126 1.5 16 300 4,889 98742918 TPD 50-190/4 2.2 16 50mm Flanged 300 B5 5.290 96087301 TPD 50-230/4 3 16 50mm Flanged 300 В5 5,778 96087302 TPD 65-30/4 0.25 6/10 65mm Flanged 200 N/A 3,989 3,582 98957990 98957988 TPD 65-60/4 6/10 65mm Flanged 200 N/A 98957996 98957998 0.55 4,249 4,655 TPD 65-90/4 65mm Flanged 96087477 0.75 16 300 В5 5.444 96384286 5.000 TPD 65-110/4 1.1 16 65mm Flanged 300 R5 5,635 96384292 5.192 96087478 65mm Flanged 16 300 В5 96384298 5,481 96087479 TPD 65-130/4 1.5 5,925 65mm Flanged TPD 65-150/4 16 300 В5 5,944 96087645 TPD 65-170/4 3 16 65mm Flanged 300 B5 6,204 96087646 В5 65mm Flanged TPD 65-240/4 4 16 300 7,125 96087647 AI F A BQQE AI F A BQQE 0.37 TPD 80-30/4 6 80mm Flanged 200 N/A 5.160 98958013 4.754 98958017 TPD 80-60/4 0.75 6 80mm Flanged 200 N/A 5,839 98958027 5,398 98958031 A F A BQQE A F A BQQE TPD 80-70/4 1.1 16 80mm Flanged 300 B5 5,732 96384304 5,290 96108657 TPD 80-90/4 1.5 16 80mm Flanged 300 В5 6,018 96384310 5,576 96108658 TPD 80-110/4 2.2 16 80mm Flanged 300 B5 6,058 96108891 TPD 80-150/4 3 16 80mm Flanged 300 R5 6.346 96108892 TPD 80-170/4 4 16 80mm Flanged 300 B5 7,981 96108893 TPD 80-240/4 5.5 300 В7 16 80mm Flanged 9,138 96108894 TPD 80-270/4 7.5 16 80mm Flanged 300 В7 9,856 96108895 96108896 TPD 80-340/4 11 16 80mm Flanged 300 Included 12,014 AI F A BQQE AI F A BQQE TPD 100-30/4 0.55 100mm Flanged 6 200 N/A 6.462 98958047 6.053 98958051 A F A BQQE A F A BQQE TPD 100-65/4 1.1 16 100mm Flanged 300 В6 7,444 99476469 7,001 99476465 TPD 100-70/4 1.5 16 100mm Flanged 300 В6 7,610 96384316 7,167 96109123 TPD 100-90/4 100mm Flanged 7,773 96109366 2.2 16 300 В6 TPD 100-110/4 3 16 100mm Flanged 300 B6 8,280 96109367 TPD 100-130/4 4 16 100mm Flanged 300 B6 9,289 96109368 TPD 100-170/4 5.5 16 100mm Flanged 300 В6 10,095 96109369 TPD 100-200/4 7.5 16 300 В7 11,218 96109370 100mm Flanged TPD 100-250/4 100mm Flanged 300 13,567 96109371 11 16 Included TPD 100-330/4 15 100mm Flanged 300 15,401 96109372 16 Included TPD 100-370/4 18.5 16 300 96109373 100mm Flanged Included 18.053 TPD 100-410/4 22 16 100mm Flanged 300 Included POA 96109374



CAST INCIA PO	5 60101	. LLIL VI	/ITH 4 POLES ELE	o. Ido Ivio I		330//	lph 50Hz	380-4151	/ 3ph 50Hz
	P2	PN	Pipework	Design	Optional	£	Product Code	£	Product Code
Model	kW	bar	Connection	series	baseplate		A BQQE		BQQE
TPD 125-110/4	4	16	125mm Flanged	300	B7	-	-	9,689	96109595
TPD 125-130/4	5.5	16	125mm Flanged	300	B7	-	-	10,401	96109596
TPD 125-160/4	7.5	16	125mm Flanged	300	B7	-	-	13,769	96109597
ΓPD 125-190/4	11	16	125mm Flanged	300	Included	-	-	14,585	98743739
TPD 125-230/4	15	16	125mm Flanged	300	Included		-	16,116	98743697
TPD 125-300/4	18.5	16	125mm Flanged	300	Included		-	18,664	98742596
TPD 125-340/4	22	16	125mm Flanged	300	Included		<u> </u>	20,704	98742572
TPD 125-400/4	30	16	125mm Flanged	300	Included	-		22,744	98742548
TPD 150-130/4	7.5	16	150mm Flanged	300	B7	-	-	15,297	96109904
ΓPD 150-160/4	11	16	150mm Flanged	300	Included	-	-	16,627	96109905
ΓPD 150-200/4	15	16	150mm Flanged	300	Included		-	18,157	96109906
ΓPD 150-220/4	18.5	16	150mm Flanged	300	Included	-	-	20,298	96109907
ΓPD 150-250/4	22	16	150mm Flanged	300	Included	-	-	21,928	96109908
CAST IRON PU	MPS COM	IPI FTF W	/ITH 6 POLES ELE	TRIC MOTO	)R				
	5 55		01 0220 222			230V :	lph 50Hz	380-415\	/ 3ph 50Hz
	P2	PN	Pipework	Design	Optional	£	Product Code	£	Product Cod
Model	kW	bar	Connection	series	baseplate	AFA	N BQQE	AFA	BQQE
TPD 125-60/6	1.5	16	125mm Flanged	300	B7			9,035	96109689
TPD 125-70/6	2.2	16	125mm Flanged	300	В7		-	9,566	96109690
TPD 125-80/6	3	16	125mm Flanged	300	B7		<u> </u>	11,158	98743808
TPD 125-100/6	4	16	125mm Flanged	300	B7	-	-	12,222	98743781
PD 125-130/6	5.5	16	125mm Flanged	300	B7	-	<u> </u>	13,815	98742662
PD 125-160/6	7.5	16	125mm Flanged	300	B7	-		18,066	98742638
TPD 150-60/6	2.2	16	150mm Flanged	300	B7	-	-	10,521	96109965
ΓPD 150-70/6	3	16	150mm Flanged	300	B7	-	-	12,115	96109966
ΓPD 150-90/6	4	16	150mm Flanged	300	B7	-	-	13,283	96110023
TPD 150-110/6	5.5	16	150mm Flanged	300	B7		-	14,878	96110024
CAST IRON PU	MPS COM	IPLETE W	/ITH 2 POLES ELE	CTRIC MOTO	)R				
							Lph 50Hz	380-415\	/ 3ph 50Hz
	P2	PN	Pipework	Design	Optional	£	Product Code	£	Product Cod
Model	kW	bar	Connection	series	baseplate		BQQE		BQQE
TPD 32-60/2	0.25	6/10	32mm Flanged	200	N/A	2,506	98957948	2,098	98957949
TPD 32-120/2	0.25	6/10	32mm Flanged	200	N/A	3,026	98906995	2,619	98957951
TPD 32-150/2	0.37	6/10	32mm Flanged	200	N/A	3,026	98958120	2,619	97900333
								2,941	98958122
	0.55	6/10	32mm Flanged	200	N/A	3,348	98958121	•	
	0.55	6/10 6/10	32mm Flanged 32mm Flanged	200	N/A	3,348 3,698	98958123	3,257	98958124
TPD 32-230/2								•	
TPD 32-230/2 TPD 32-200/2	0.75	6/10	32mm Flanged	200	N/A	3,698	98958123	3,257	98958124
TPD 32-230/2 TPD 32-200/2 TPD 32-250/2	0.75	6/10	32mm Flanged 32mm Flanged	300	N/A B5	3,698 4,201	98958123 96384220	3,257 3,757	98958124 96086709
TPD 32-230/2 TPD 32-200/2 TPD 32-250/2 TPD 32-320/2	0.75 1.1 1.5	6/10 16 16	32mm Flanged 32mm Flanged 32mm Flanged	300 300	N/A B5 B5	3,698 4,201	98958123 96384220	3,257 3,757 4,191	98958124 96086709 96086710
TPD 32-230/2  TPD 32-200/2  TPD 32-250/2  TPD 32-320/2  TPD 32-380/2	0.75 1.1 1.5 2.2	6/10 16 16 16	32mm Flanged 32mm Flanged 32mm Flanged 32mm Flanged	300 300 300 300	N/A B5 B5 B5	3,698 4,201 4,634	98958123 96384220 96384226	3,257 3,757 4,191 4,526	98958124 96086709 96086710 96086801 96086802 96086803
TPD 32-230/2 TPD 32-200/2 TPD 32-250/2 TPD 32-320/2 TPD 32-380/2 TPD 32-460/2	0.75 1.1 1.5 2.2 3	6/10 16 16 16 16	32mm Flanged 32mm Flanged 32mm Flanged 32mm Flanged 32mm Flanged 32mm Flanged	300 300 300 300 300	N/A  B5 B5 B5 B5 B5	3,698 4,201 4,634 -	98958123 96384220 96384226 -	3,257 3,757 4,191 4,526 4,913	98958124 96086709 96086710 96086801 96086802
TPD 32-230/2 TPD 32-200/2 TPD 32-250/2 TPD 32-320/2 TPD 32-380/2 TPD 32-460/2 TPD 32-580/2	0.75  1.1  1.5  2.2  3  4	6/10 16 16 16 16 16	32mm Flanged	300 300 300 300 300 300	N/A  B5 B5 B5 B5 B5 B5 B5 B5	3,698 4,201 4,634 -	98958123 96384220 96384226 - -	3,257 3,757 4,191 4,526 4,913 5,058 6,260	98958124 96086709 96086710 96086801 96086802 96086803
FPD 32-230/2 FPD 32-200/2 FPD 32-250/2 FPD 32-320/2 FPD 32-380/2 FPD 32-460/2 FPD 32-580/2 FPD 40-60/2	0.75 1.1 1.5 2.2 3 4 5.5	6/10 16 16 16 16 16 16	32mm Flanged	300 300 300 300 300 300 300 300	B5 B5 B5 B5 B5 B5	3,698  4,201 4,634	98958123 96384220 96384226 - - -	3,257 3,757 4,191 4,526 4,913 5,058	98958124 96086709 96086710 96086801 96086802 96086803 96086804
FPD 32-230/2 FPD 32-200/2 FPD 32-250/2 FPD 32-320/2 FPD 32-380/2 FPD 32-580/2 FPD 32-580/2 FPD 40-60/2 FPD 40-120/2	0.75  1.1 1.5 2.2 3 4 5.5	6/10 16 16 16 16 16 16 16 16	32mm Flanged 40mm Flanged	300 300 300 300 300 300 300 300	N/A  B5 B5 B5 B5 B5 B5 B5 B7 B5 B7	3,698 4,201 4,634 2,804	98958123 96384220 96384226 - - - - 98470784	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397	98958124 96086709 96086710 96086801 96086802 96086803 96086804
IPD 32-230/2 IPD 32-200/2 IPD 32-250/2 IPD 32-320/2 IPD 32-380/2 IPD 32-460/2 IPD 32-580/2 IPD 40-60/2 IPD 40-120/2 IPD 40-190/2	0.75  1.1 1.5 2.2 3 4 5.5  0.25 0.37	6/10 16 16 16 16 16 16 16 16 16 16	32mm Flanged 40mm Flanged 40mm Flanged	300 300 300 300 300 300 300 300 200	N/A  B5  B5  B5  B5  B5  B5  N/A  N/A	3,698  4,201 4,634 2,804 3,361	98958123 96384220 96384226 - - - - - 98470784 98957963	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397 2,954	98958124 96086709 96086710 96086801 96086802 96086803 96086804 98455942 98083077
FPD 32-230/2 FPD 32-200/2 FPD 32-250/2 FPD 32-320/2 FPD 32-380/2 FPD 32-460/2 FPD 32-580/2 FPD 40-60/2 FPD 40-120/2 FPD 40-120/2 FPD 40-120/2 FPD 40-230/2	0.75  1.1 1.5 2.2 3 4 5.5  0.25 0.37 0.75	6/10 16 16 16 16 16 16 16 16 16 16	32mm Flanged 40mm Flanged 40mm Flanged	300 300 300 300 300 300 300 300 200 200	N/A  B5  B5  B5  B5  B5  B5  N/A  N/A  N/A	3,698  4,201 4,634 2,804 3,361 4,007	98958123 96384220 96384226 - - - - - - - - - - - - -	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397 2,954 3,566	98958124 96086709 96086710 96086801 96086802 96086803 96086804 98455942 98083077 98173086
PD 32-230/2 PD 32-200/2 PD 32-250/2 PD 32-320/2 PD 32-380/2 PD 32-380/2 PD 32-580/2 PD 32-580/2 PD 40-60/2 PD 40-120/2 PD 40-120/2 PD 40-230/2 PD 40-270/2	0.75  1.1  1.5  2.2  3  4  5.5  0.25  0.37  0.75  1.1  1.5	6/10 16 16 16 16 16 16 16 16 16 16	32mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged	200  300 300 300 300 300 300 200 200 200	N/A  B5 B5 B5 B5 B5 B5 N/A N/A N/A N/A N/A	3,698  4,201 4,634 2,804 3,361 4,007 4,115	98958123 96384220 96384226 - - - - - 98470784 98957963 98958131 98958132	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397 2,954 3,566 3,673 3,991	98958124 96086709 96086710 96086801 96086802 96086803 96086804 98455942 98083077 98173086 98958133 98915456
PD 32-230/2 PD 32-200/2 PD 32-250/2 PD 32-320/2 PD 32-380/2 PD 32-380/2 PD 32-580/2 PD 40-60/2 PD 40-120/2 PD 40-120/2 PD 40-20/2 PD 40-270/2 PD 40-240/2	0.75  1.1 1.5 2.2 3 4 5.5  0.25 0.37 0.75 1.1 1.5	6/10  16  16  16  16  16  16  16  16  16	32mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged	200 300 300 300 300 300 300 200 200 200	N/A  B5 B5 B5 B5 B5 B5 N/A N/A N/A N/A N/A N/A N/A N/A N/A	3,698  4,201 4,634 2,804 3,361 4,007 4,115 4,435	98958123 96384220 96384226 - - - - - 98470784 98957963 98958131 98958132	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397 2,954 3,566 3,673 3,991 4,807	98958124 96086709 96086801 96086802 96086803 96086804 98455942 98083077 98173086 98958133 98915456
PD 32-230/2 PD 32-200/2 PD 32-250/2 PD 32-320/2 PD 32-380/2 PD 32-580/2 PD 32-580/2 PD 40-60/2 PD 40-120/2 PD 40-230/2 PD 40-240/2 PD 40-240/2 PD 40-300/2	0.75  1.1 1.5 2.2 3 4 5.5  0.25 0.37 0.75 1.1 1.5	6/10 16 16 16 16 16 16 16 16 16 16	32mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged	200  300 300 300 300 300 300 200 200 200	N/A  B5 B5 B5 B5 B5 B5 B7 N/A	3,698  4,201 4,634 2,804 3,361 4,007 4,115 4,435	98958123 96384220 96384226 - - - - - - 98470784 98957963 98958131 98958132 98958134	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397 2,954 3,566 3,673 3,991 4,807 5,095	98958124 96086709 96086710 96086801 96086802 96086803 96086804 98455942 98083077 98173086 98958133 98915456 96086953 96086954
TPD 32-230/2 TPD 32-200/2 TPD 32-250/2 TPD 32-320/2 TPD 32-380/2 TPD 32-460/2 TPD 32-580/2 TPD 40-60/2 TPD 40-120/2 TPD 40-120/2 TPD 40-230/2 TPD 40-270/2 TPD 40-240/2 TPD 40-300/2 TPD 40-300/2 TPD 40-300/2 TPD 40-300/2	0.75  1.1 1.5 2.2 3 4 5.5  0.25 0.37 0.75 1.1 1.5  2.2 3 4	6/10  16  16  16  16  16  16  16  16  16	32mm Flanged 40mm Flanged	200 300 300 300 300 300 300 200 200 200	N/A  B5 B5 B5 B5 B5 B5 B7 N/A	3,698  4,201 4,634 2,804 3,361 4,007 4,115 4,435	98958123 96384220 96384226 - - - - - 98470784 98957963 98958131 98958132	3,257  3,757 4,191 4,526 4,913 5,058 6,260  2,397 2,954 3,566 3,673 3,991  4,807 5,095 5,768	98958124 96086709 96086710 96086801 96086802 96086804 98455942 98083077 98173086 98958133 98915456 96086953 96086954
TPD 32-180/2 TPD 32-230/2 TPD 32-230/2 TPD 32-250/2 TPD 32-320/2 TPD 32-320/2 TPD 32-380/2 TPD 32-580/2 TPD 40-120/2 TPD 40-120/2 TPD 40-230/2 TPD 40-230/2 TPD 40-300/2 TPD 40-530/2	0.75  1.1 1.5 2.2 3 4 5.5  0.25 0.37 0.75 1.1 1.5	6/10 16 16 16 16 16 16 16 16 16 16	32mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged 40mm Flanged	200  300 300 300 300 300 300 200 200 200	N/A  B5 B5 B5 B5 B5 B5 B7 N/A	3,698  4,201 4,634 2,804 3,361 4,007 4,115 4,435	98958123 96384220 96384226 - - - - - - 98470784 98957963 98958131 98958132 98958134	3,257 3,757 4,191 4,526 4,913 5,058 6,260 2,397 2,954 3,566 3,673 3,991 4,807 5,095	98958124 96086709 96086710 96086801 96086802 96086803 96086804 98455942 98083077 98173086 98958133 98915456 96086953 96086954



### CAST IRON PUMPS COMPLETE WITH 2 POLES ELECTRIC MOTOR 230V 1ph 50Hz 380-415V 3ph 50Hz P2 Product Code PN Pipework Design Optional **Product Code** A F A BQQE A F A BQQE kW Model bar Connection series baseplate TPD 50-60/2 3.364 98957978 2.957 98957979 0.37 6/10 50mm Flanged 200 N/A TPD 50-120/2 0.75 6/10 50mm Flanged 200 N/A 4,025 98957981 3,582 98957982 TPD 50-180/2 0.75 50mm Flanged 200 N/A 4,457 98957984 4,015 98957985 6/10 TPD 50-160/2 1.1 16 50mm Flanged 300 В5 4,705 96384274 4,262 96087061 TPD 50-190/2 1.5 16 50mm Flanged 300 B5 96384280 96087062 5,059 4,617 50mm Flanged TPD 50-240/2 2.2 16 300 B5 4,828 96087249 TPD 50-290/2 3 16 50mm Flanged 300 B5 5.144 96087250 50mm Flanged TPD 50-360/2 4 16 300 В5 5,914 96087251 TPD 50-430/2 5.5 16 50mm Flanged 300 B5 7,824 96087252 TPD 50-420/2 7.5 16 50mm Flanged 300 В5 7,844 98742882 TPD 50-540/2 50mm Flanged 11 300 16 Included 10,918 98742830 TPD 50-630/2 15 16 50mm Flanged 300 Included 11.566 98742788 TPD 50-710/2 15 16 50mm Flanged 300 Included 12.040 96087255 TPD 50-830/2 18.5 16 50mm Flanged 300 15,021 96087256 Included TPD 50-900/2 22 16 50mm Flanged 300 Included 17,233 96087257 3,585 98958091 TPD 65-60/2 0.55 6/10 65mm Flanged 200 N/A 98958090 3,991 TPD 65-120/2 1.1 6/10 65mm Flanged 200 N/A 4,899 98958002 4,457 98958003 TPD 65-180/2 1.5 6/10 65mm Flanged 200 N/A 5,277 98958005 4,835 98958006 TPD 65-170/2 2.2 16 65mm Flanged 300 В5 4,847 98742445 98742403 TPD 65-210/2 300 В5 5,192 16 65mm Flanged 3 TPD 65-250/2 4 16 65mm Flanged 300 В5 5,944 98742364 TPD 65-340/2 5.5 16 65mm Flanged 300 B5 7.981 96087584 TPD 65-410/2 7.5 16 65mm Flanged 300 **B5** 8,365 96087585 TPD 65-460/2 11 16 65mm Flanged 300 Included 11,558 96087586 TPD 65-550/2 15 65mm Flanged 16 300 Included 13,579 96087587 TPD 65-660/2 18.5 16 65mm Flanged 300 16,079 96087588 Included 96087589 TPD 65-720/2 22 16 65mm Flanged 300 17,932 Included TPD 65-930/2 30 16 65mm Flanged 300 Included POA 96087590 AI F A BOOE AI F A BOOE TPD 80-120/2 1.5 10 80mm Flanged 200 N/A 5,286 98958037 5,583 98958039 A F A BQQE A F A BQQE TPD 80-140/2 2.2 16 80mm Flanged 300 B5 5,095 96108787 96108788 TPD 80-180/2 80mm Flanged B5 5.576 3 16 300 4 TPD 80-210/2 16 80mm Flanged 300 **B5** 6.255 96108789 TPD 80-240/2 5.5 16 80mm Flanged 300 **B5** 6,341 96108790 TPD 80-250/2 80mm Flanged 8,559 96108791 7.5 16 300 В5 80mm Flanged 11,849 TPD 80-330/2 11 16 300 Included 96108792 TPD 80-400/2 15 16 80mm Flanged 300 Included 11.885 96108793 TPD 80-520/2 80mm Flanged 18.5 16 300 14.868 96108794 Included 80mm Flanged TPD 80-570/2 22 16 300 Included 18,576 96108795 TPD 80-700/2 30 16 80mm Flanged 300 Included POA 96108796 AI F A BQQE ALF A BOOE TPD 100-120/2 2.2 6 100mm Flanged 200 N/A 6,972 98958094 A F A BQQE A F A BQQE TPD 100-160/2 В5 4 16 100mm Flanged 300 5.935 96109245 TPD 100-200/2 5.5 16 100mm Flanged 300 B5 7.466 96109246 TPD 100-240/2 7.5 16 100mm Flanged 300 **B5** 7,773 96109247 TPD 100-250/2 11 16 100mm Flanged 300 Included 12,232 96109248 15 TPD 100-310/2 16 100mm Flanged 300 Included 13,771 96109249 TPD 100-360/2 18.5 16 100mm Flanged 300 Included 16.653 96109250 TPD 100-390/2 22 18,963 16 100mm Flanged 300 Included 96109251 30 TPD 100-480/2 16 100mm Flanged 300 Included POA 96109252

### PUMPS

High % Glycol pumps may need an oversized motor and will need configuration by your Sales Office
Custom Built pump options; different seals, elastomers, 60Hz motors can be configured and priced on request by your Sales Office
Some models are available in PN25. Contact the Sales Office for details.

### **ELECTRIC MOTOR**

1ph: 220-230/240V/50Hz or 240V/50Hz

3ph up to and including 1.50kW: 220-240D/380-415Y/50Hz

3ph from 2.2kW and above: 380-415D/50Hz

IP55 Class F insulation

Motors 0.75kW and above are IE3 Efficiency.

### BASEPLATES

When applicable, baseplates for TP(E)(D) are available as an accessory. See page 31 for codes and prices.

**CATEGORY 1 - TPD SINGLE STAGE TWIN HEAD IN LINE PUMPS** 





# **CATEGORY 1 - TPE2 SINGLE STAGE IN LINE HIGH EFFICIENCY PUMPS**

CAST IRON SINGLE HEAD PLIMPS COMPLETE WITH VARIABLE SPEED HIGH FEELCIENCY MOTOR

					230V 1p	h 50/60Hz	380-500V 3ph 50/60Hz	
	P2	PN	Pipework	Transducer	£	Product Code	£	Product Code
Model	kW	bar	Connection	Range	AFA	A BQQE	A F A BQQE	
TPE2 32-80-N	0.25	6/10	32mm Flanged	0-1 bar	2,469	98438338	2,837	98437880
TPE2 32-120-N	0.25	6/10	32mm Flanged	0-1 bar	2,772	98438339	3,141	98437881
TPE2 32-150-N	0.37	6/10	32mm Flanged	0-1.6 bar	3,010	98438340	3,350	98437882
TPE2 32-180-N	0.55	6/10	32mm Flanged	0-2.5 bar	3,256	98438341	3,574	98437883
TPE2 32-200-N	0.75	6/10	32mm Flanged	0-2.5 bar	3,419	98438342	3,712	98437884
TPE2 40-80-N	0.25	6/10	40mm Flanged	0-1 bar	2,983	98438343	3,350	98437885
TPE2 40-120-N	0.37	6/10	40mm Flanged	0-1.6 bar	3,232	98438344	3,574	98437886
TPE2 40-150-N	0.55	6/10	40mm Flanged	0-1.6 bar	3,492	98438345	3,811	98437887
TPE2 40-180-N	0.75	6/10	40mm Flanged	0-2.5 bar	3,765	98438346	4,057	98437888
TPE2 40-200-N	1.1	6/10	40mm Flanged	0-2.5 bar	3,942	98438347	4,218	98437889
TPE2 40-240-N	1.5	6/10	40mm Flanged	0-2.5 bar	4,330	98438348	4,586	98437890
TPE2 50-60-N	0.37	6/10	50mm Flanged	0-0.6 bar	3,134	98438349	3,476	98437891
TPE2 50-80-N	0.37	6/10	50mm Flanged	0-1 bar	3,370	98438350	3,712	98437892
TPE2 50-120-N	0.55	6/10	50mm Flanged	0-1.6 bar	3,639	98438351	3,958	98437893
TPE2 50-150-N	0.75	6/10	50mm Flanged	0-1.6 bar	3,925	98438352	4,218	98437894
TPE2 50-180-N	1.1	6/10	50mm Flanged	0-2.5 bar	4,215	98438353	4,490	98437895
TPE2 50-200-N	1.5	6/10	50mm Flanged	0-2.5 bar	4,520	98438354	4,775	98437896
TPE2 50-240-N	2.2	6/10	50mm Flanged	0-2.5 bar	-	-	5,073	98437897
TPE2 65-60-N	0.37	6/10	65mm Flanged	0-0.6 bar	3,617	98438355	3,958	98437898
TPE2 65-80-N	0.55	6/10	65mm Flanged	0-1 bar	3,899	98438356	4,218	98437899
TPE2 65-120-N	0.75	6/10	65mm Flanged	0-1.6 bar	4,199	98438357	4,490	98437900
TPE2 65-150-N	1.1	6/10	65mm Flanged	0-1.6 bar	4,500	98438358	4,775	98437901
TPE2 65-180-N	1.5	6/10	65mm Flanged	0-2.5 bar	4,815	98438359	5,073	98437902
TPE2 65-200-N	2.2	6/10	65mm Flanged	0-2.5 bar	-	-	5,388	98437903
TPE2 80-40-N	0.25	10	80mm Flanged	0-0.6 bar	3,672	98437735	3,958	98437601
TPE2 80-120-N	1.1	10	80mm Flanged	0-1.6 bar	4,904	98437737	5,073	98437603
TPE2 80-150-N	1.5	10	80mm Flanged	0-1.6 bar	5,246	98437738	5,388	98437604
TPE2 80-180-N	2.2	10	80mm Flanged	0-2.5 bar	-	-	5,715	98437605
TPE2 100-40-N	0.25	10	100mm Flanged	0-0.6 bar	3,936	98437726	4,313	98437612
TPE2 100-120-N	1.1	10	100mm Flanged	0-1.6 bar	5,227	98437728	5,508	98437614
TPE2 100-150-N	1.5	10	100mm Flanged	0-1.6 bar	5,583	98437729	5,845	98437615
TPE2 100-180-N	2.2	10	100mm Flanged	0-2.5 bar	-		6,200	98437616

### TPE2 PUMI

Transducers are not included with the pump but are optional extras listed on Page 39. One transducer is required for a single TPE2 pump. If required, select the appropriate differential pressure transducer according to the size indicated.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

TPE2 include sensor connection points on both flanges. In some models, the tapping is on the flange side, rather than on the top.

PN16 and stainless steel versions are available on request, contact the Sales Office.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### **BASEPLATES**

Baseplates are not available for TPE2 single head pumps.





# **CATEGORY 1 - TPE2 SINGLE STAGE IN LINE HIGH EFFICIENCY PUMPS**

CAST IRON TWIN HEAD PLIMPS COMPLETE WITH VARIABLE SPEED HIGH FEELCIENCY MOTOR

					230V 1ph 50/60Hz		380-500V 3ph 50/60Hz		
	P2	PN	Pipework	Transducer	£	Product Code	£	Product Code	
Model	kW	bar	Connection	Range	A F A	BQQE	A F A	A BQQE	
TPE2 D 32-80-N	0.25	6/10	32mm Flanged	0-1 bar	4,848	98438555	5,585	98438125	
TPE2 D 32-120-N	0.25	6/10	32mm Flanged	0-1 bar	5,233	98438556	5,969	98438126	
TPE2 D 32-150-N	0.37	6/10	32mm Flanged	0-1.6 bar	5,690	98438557	6,373	98438127	
TPE2 D 32-180-N	0.55	6/10	32mm Flanged	0-2.5 bar	5,972	98438558	6,613	98438128	
TPE2 D 32-200-N	0.75	6/10	32mm Flanged	0-2.5 bar	6,655	98438559	7,244	98438129	
TPE2 D 40-80-N	0.25	6/10	40mm Flanged	0-1 bar	5,636	98438560	6,373	98438130	
TPE2 D 40-120-N	0.37	6/10	40mm Flanged	0-1.6 bar	6,113	98438561	6,797	98438131	
TPE2 D 40-150-N	0.55	6/10	40mm Flanged	0-1.6 bar	6,603	98438562	7,244	98438132	
TPE2 D 40-180-N	0.75	6/10	40mm Flanged	0-2.5 bar	6,941	98438563	7,529	98438133	
TPE2 D 40-200-N	1.1	6/10	40mm Flanged	0-2.5 bar	7,467	98438564	8,019	98438134	
TPE2 D 40-240-N	1.5	6/10	40mm Flanged	0-2.5 bar	8,021	98438565	8,535	98438135	
TPE2 D 50-60-N	0.37	6/10	50mm Flanged	0-0.6 bar	5,929	98438566	6,613	98438136	
TPE2 D 50-80-N	0.37	6/10	50mm Flanged	0-1 bar	6,376	98438567	7,060	98438137	
TPE2 D 50-120-N	0.55	6/10	50mm Flanged	0-1.6 bar	6,889	98438568	7,529	98438138	
TPE2 D 50-150-N	0.75	6/10	50mm Flanged	0-1.6 bar	7,431	98438569	8,019	98438139	
TPE2 D 50-180-N	1.1	6/10	50mm Flanged	0-2.5 bar	7,982	98438570	8,535	98438140	
TPE2 D 50-200-N	1.5	6/10	50mm Flanged	0-2.5 bar	8,567	98438571	9,080	98438141	
TPE2 D 50-240-N	2.2	6/10	50mm Flanged	0-2.5 bar	-	-	9,644	98438142	
TPE2 D 65-60-N	0.37	6/10	65mm Flanged	0-0.6 bar	6,846	98438572	7,529	98438143	
TPE2 D 65-80-N	0.55	6/10	65mm Flanged	0-1 bar	7,377	98438573	8,019	98438144	
TPE2 D 65-120-N	0.75	6/10	65mm Flanged	0-1.6 bar	7,946	98438574	8,535	98438145	
TPE2 D 65-150-N	1.1	6/10	65mm Flanged	0-1.6 bar	8,527	98438575	9,080	98438146	
TPE2 D 65-180-N	1.5	6/10	65mm Flanged	0-2.5 bar	9,131	98438576	9,644	98438147	
TPE2 D 65-200-N	2.2	6/10	65mm Flanged	0-2.5 bar	-	-	10,238	98438148	
TPE2 D 80-40-N	0.25	10	80mm Flanged	0-0.6 bar	6,793	98437784	7,529	98437671	
TPE2 D 80-120-N	1.1	10	80mm Flanged	0-1.6 bar	9,093	98437786	9,644	98437673	
TPE2 D 80-150-N	1.5	10	80mm Flanged	0-1.6 bar	9,726	98437787	10,238	98437674	
TPE2 D 80-180-N	2.2	10	80mm Flanged	0-2.5 bar		-	10,866	98437675	
TPE2 D 100-40-N	0.25	10	100mm Flanged	0-0.6 bar	7,282	98437788	8,019	98437676	
TPE2 D 100-120-N	1.1	10	100mm Flanged	0-1.6 bar	9,687	98437790	10,238	98437678	
TPE2 D 100-150-N	1.5	10	100mm Flanged	0-1.6 bar	10,355	98437791	10,866	98437679	
TPE2 D 100-180-N	2.2	10	100mm Flanged	0-2.5 bar	-	-	11,530	98437680	

### TPE2 D PUME

Transducers are not included with the pump but are optional extras listed on Page 39. Two transducers are required for a twin TPE2 D pump.

If required, select the appropriate differential pressure transducer according to the size indicated.

Two transducers are required for a Twin TPE2 D pump.

The extra fittings kit will allow two differential pressure transducers to be fitted on to the suction and discharge flanges - see page 39

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

TPE2 D include sensor connection points on both flanges. In some models, the tapping is on the flange side, rather than on the top.

PN16 versions are available on request, contact the Sales Office.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES

When applicable, baseplates for TPE2 D are available as an accessory. See page 31 for codes and prices.





# **CATEGORY 1 - TPE3 SINGLE STAGE IN LINE HIGH EFFICIENCY PUMPS**

# CAST IRON SINGLE HEAD PUMPS COMPLETE WITH VARIABLE SPEED HIGH EFFICIENCY MOTOR AND BUILT-IN DP+T SENSOR

				230V 1p	h 50/60Hz	380-500V	3ph 50/60Hz
	P2	PN	Pipework	£	Product Code	£	Product Code
Model	kW	bar	Connection	A F A	A BQQE	AFA	A BQQE
TPE3 32-80-S	0.25	6/10	32mm Flanged	3,663	99272234	4,031	99272202
TPE3 32-120-S	0.25	6/10	32mm Flanged	3,965	99272235	4,333	99272203
TPE3 32-150-S	0.37	6/10	32mm Flanged	4,201	99272236	4,543	99272204
TPE3 32-180-S	0.55	6/10	32mm Flanged	4,448	99272237	4,766	99272205
TPE3 32-200-S	0.75	6/10	32mm Flanged	4,612	99272238	4,904	99272206
TPE3 40-80-S	0.25	6/10	40mm Flanged	4,175	99272239	4,543	99272207
TPE3 40-120-S	0.37	6/10	40mm Flanged	4,425	99272240	4,766	99272208
TPE3 40-150-S	0.55	6/10	40mm Flanged	4,684	99272241	5,002	99272209
TPE3 40-180-S	0.75	6/10	40mm Flanged	4,957	99272242	5,250	99272210
TPE3 40-200-S	1.1	6/10	40mm Flanged	5,135	99272253	5,410	99272211
TPE3 40-240-S	1.5	6/10	40mm Flanged	5,522	99272254	5,778	99272212
TPE3 50-60-S	0.37	6/10	50mm Flanged	4,326	99272255	4,667	99272213
TPE3 50-80-S	0.37	6/10	50mm Flanged	4,562	99272256	4,904	99272214
TPE3 50-120-S	0.55	6/10	50mm Flanged	4,832	99272257	5,152	99272215
TPE3 50-150-S	0.75	6/10	50mm Flanged	5,119	99272258	5,410	99272216
TPE3 50-180-S	1.1	6/10	50mm Flanged	5,407	99272259	5,683	99272217
TPE3 50-200-S	1.5	6/10	50mm Flanged	5,713	99272260	5,969	99272218
TPE3 50-240-S	2.2	6/10	50mm Flanged		-	6,264	99272219
TPE3 65-60-S	0.37	6/10	65mm Flanged	4,809	99272261	5,152	99272220
TPE3 65-80-S	0.55	6/10	65mm Flanged	5,092	99272262	5,410	99272221
TPE3 65-120-S	0.75	6/10	65mm Flanged	5,390	99272263	5,683	99272222
TPE3 65-150-S	1.1	6/10	65mm Flanged	5,693	99272264	5,969	99272223
TPE3 65-180-S	1.5	6/10	65mm Flanged	6,008	99272265	6,264	99272224
TPE3 65-200-S	2.2	6/10	65mm Flanged		-	6,580	99272225
TPE3 80-40-S	0.25	10	80mm Flanged	4,783	99272196	5,152	99272188
TPE3 80-120-S	1.1	10	80mm Flanged	5,988	99272197	6,264	99272189
TPE3 80-150-S	1.5	10	80mm Flanged	6,324	99272198	6,580	99272190
TPE3 80-180-S	2.2	10	80mm Flanged	-	-	6,908	99272191
TPE3 100-40-S	0.25	10	100mm Flanged	5,042	99272199	5,410	99272192
		10	•	6,304		6,580	
TPE3 100-120-S TPE3 100-150-S	1.1	10	100mm Flanged	6,304 6,652	99272200	•	99272193
	2.2	10	100mm Flanged	0,052	99272201	6,908	99272194
TPE3 100-180-S	۷.۷	10	100mm Flanged	<del></del>		7,257	99272195

### TPE3 PUMPS

 ${\sf TPE3}\ pumps\ have\ a\ built-in\ differential\ pressure\ and\ temperature\ transducer\ and\ are\ pre-programmed\ for\ close\ loop\ control.$ 

These units are NOT RECOMMENDED for % speed change (uncontrolled mode) from an external analogue source (BMS). Use TPE2 or TPE series 1000 for this application These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

PN16 and stainless steel versions are available on request, contact the Sales Office.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### **BASEPLATES**

Baseplates are not available for TPE3 single head pumps.



# **CATEGORY 1 - TPE3 SINGLE STAGE IN LINE HIGH EFFICIENCY PUMPS**

# CAST IRON TWIN HEAD PUMPS COMPLETE WITH VARIABLE SPEED HIGH EFFICIENCY MOTOR AND BUILT-IN DP+T SENSOR

				230V 1p	h 50/60Hz	380-500V	3ph 50/60Hz
	P2	PN	Pipework	£	Product Code	£	Product Code
Model	kW	bar	Connection	A F A	A BQQE	A F A	BQQE
TPE3 D 32-80-S	0.25	6/10	32mm Flanged	6,042	99272582	6,776	99272540
TPE3 D 32-120-S	0.25	6/10	32mm Flanged	6,426	99272583	7,160	99272541
TPE3 D 32-150-S	0.37	6/10	32mm Flanged	6,882	99272584	7,566	99272542
TPE3 D 32-180-S	0.55	6/10	32mm Flanged	7,165	99272585	7,804	99272543
TPE3 D 32-200-S	0.75	6/10	32mm Flanged	7,848	99272586	8,436	99272544
TPE3 D 40-80-S	0.25	6/10	40mm Flanged	6,830	99272587	7,566	99272545
TPE3 D 40-120-S	0.37	6/10	40mm Flanged	7,306	99272588	7,989	99272546
TPE3 D 40-150-S	0.55	6/10	40mm Flanged	7,794	99272589	8,436	99272547
TPE3 D 40-180-S	0.75	6/10	40mm Flanged	8,133	99272590	8,722	99272548
TPE3 D 40-200-S	1.1	6/10	40mm Flanged	8,659	99272591	9,210	99272549
TPE3 D 40-240-S	1.5	6/10	40mm Flanged	9,215	99272592	9,726	99272550
TPE3 D 50-60-S	0.37	6/10	50mm Flanged	7,122	99272593	7,804	99272551
TPE3 D 50-80-S	0.37	6/10	50mm Flanged	7,568	99272594	8,251	99272552
TPE3 D 50-120-S	0.55	6/10	50mm Flanged	8,080	99272595	8,722	99272553
TPE3 D 50-150-S	0.75	6/10	50mm Flanged	8,623	99272596	9,210	99272554
TPE3 D 50-180-S	1.1	6/10	50mm Flanged	9,175	99272597	9,726	99272555
TPE3 D 50-200-S	1.5	6/10	50mm Flanged	9,760	99272598	10,271	99272556
TPE3 D 50-240-S	2.2	6/10	50mm Flanged		-	10,837	99272557
TPE3 D 65-60-S	0.37	6/10	65mm Flanged	8,038	99272599	8,722	99272558
TPE3 D 65-80-S	0.55	6/10	65mm Flanged	8,571	99272600	9,210	99272559
TPE3 D 65-120-S	0.75	6/10	65mm Flanged	9,139	99272601	9,726	99272560
TPE3 D 65-150-S	1.1	6/10	65mm Flanged	9,721	99272602	10,271	99272561
TPE3 D 65-180-S	1.5	6/10	65mm Flanged	10,325	99272603	10,837	99272562
TPE3 D 65-200-S	2.2	6/10	65mm Flanged		-	11,432	99272573
TPE3 D 80-40-S	0.25	10	80mm Flanged	7,986	99272534	8,722	99272526
TPE3 D 80-120-S	1.1	10	80mm Flanged	10,285	99272535	10,837	99272527
TPE3 D 80-150-S	1.5	10	80mm Flanged	10,920	99272536	11,432	99272528
TPE3 D 80-180-S	2.2	10	80mm Flanged		-	12,059	99272529
TPE3 D 100-40-S	0.25	10	100mm Flanged	8,476	99272537	9,210	99272530
TPE3 D 100-40-5	1.1	10	100mm Flanged	10,880	99272538	11,432	99272531
TPE3 D 100-150-S	1.5	10	100mm Flanged	11,546	99272539	12,059	99272532
TPE3 D 100-180-S	2.2	10	100mm Flanged		-	12,722	99272533
11 23 D 100 100-3	۷.۷	10	100mm ridinged			16,166	332,233

### TPE3 D PUMPS

TPE3 D pumps are supplied with two built-in differential pressure and temperature transducer and are pre-programmed for close loop control. These units are NOT RECOMMENDED for % speed change (uncontrolled mode) from an external analogue source (BMS).

Use TPE2 D or TPED series 1000 for this application.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

Digital stop/start to both pump heads simultaneously is acceptable.

PN16 versions are available on request, contact the Sales Office.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

# BASEPLATES

When applicable, baseplates for TPE3 D are available as an accessory. See page 31 for codes and prices.



### **CATEGORY 1 - TPE SERIES 1000 SINGLE STAGE SINGLE HEAD IN LINE PUMPS** SERIES 1000 CAST IRON PUMPS COMPLETE WITH 4 POLES VARIABLE SPEED ELECTRIC MOTOR 380-480/500V 3ph 50/60Hz P2 PΝ Transducer Pipework Design **Product Code** A F A BQQE kW Model bar Connection Range series TPE 65-240/4 65mm Flanged 6.905 99113696 4 16 0-4 bar 300 TPE 80-150/4 16 80mm Flanged 0-2.5 bar 300 99113698 6,110 80mm Flanged TPE 80-170/4 16 0-2.5 bar 300 7,342 99113699 TPE 80-240/4 5.5 80mm Flanged 0-4 bar 300 99113700 16 8,600 TPE 80-270/4 7.5 16 80mm Flanged 0-4 bar 300 9,683 99113701 TPE 80-340/4 11 16 80mm Flanged 0-4 bar 300 12,263 96110190 TPE 100-65/4 1.1 16 100mm Flanged 0-1 bar 300 5,536 99476471 TPE 100-70/4 16 100mm Flanged 0-1 bar 300 5,729 99113702 TPE 100-90/4 2.2 16 100mm Flanged 0-1.6 bar 300 6,432 99113703 TPE 100-110/4 100mm Flanged 300 3 16 0-1.6 bar 7,095 99113704 TPE 100-130/4 4 16 100mm Flanged 0-2.5 bar 300 8.009 99113705 TPE 100-170/4 5.5 16 100mm Flanged 0-2.5 bar 300 9.302 99113706 TPE 100-200/4 7.5 16 100mm Flanged 0-2.5 bar 300 10,620 99113707 TPE 100-250/4 11 16 100mm Flanged 0-4 bar 300 13,340 96110403 TPE 100-330/4 15 16 100mm Flanged 0-4 bar 300 15,317 96110404 125mm Flanged 0-1 bar TPE 125-60/4 16 300 6,475 99113653 125mm Flanged TPE 125-80/4 3 16 0-1.6 bar 300 7,315 99113654 TPE 125-95/4 16 125mm Flanged 0-1.6 bar 300 8,360 99113655 99113708 TPE 125-110/4 4 125mm Flanged 300 8,419 16 0-1.6 bar TPE 125-130/4 5.5 16 125mm Flanged 0-1.6 bar 300 9,467 99113709 TPE 125-160/4 7.5 16 125mm Flanged 0-2.5 bar 300 11.973 99113710 125mm Flanged TPE 125-190/4 11 16 0-2.5 bar 300 13,882 98743751 TPE 125-230/4 15 16 125mm Flanged 0-4 bar 300 15,696 98743709 TPE 150-70/4 5.5 16 150mm Flanged 0-1.6 bar 300 10,108 99113658 TPE 150-110/4 7.5 16 150mm Flanged 0-1.6 bar 300 12,677 99113659 TPE 150-130/4 7.5 16 150mm Flanged 0-1.6 bar 300 12.789 99113711 TPE 150-155/4 11 16 150mm Flanged 0-2.5 bar 300 14,900 98908273 TPE 150-170/4 15 16 98908252 150mm Flanged 0-2.5 bar 300 16,592 TPE 150-200/4 15 16 150mm Flanged 0-2.5 bar 300 16,779 96110627 TPE 200-50/4 99113660 16 200mm Flanged 0-0.6 bar TPE 200-70/4 5.5 16 11,560 99113661 200mm Flanged 0-1 bar 300 TPE 200-90/4 16 200mm Flanged 0-1 bar 300 14,014 99113662 TPE 200-130/4 11 200mm Flanged 16 0-1.6 bar 300 16.977 97927474 15 200mm Flanged TPE 200-150/4 16 0-2.5 bar 300 18,405 97927473 TPE 200-160/4 15 16 200mm Flanged 0-2.5 bar 300 18,405 97927479

### **SERIES 1000 TPE PUMPS**

Transducers are not included with the pump but are optional extras listed on Page 39. One transducer is required for a single TPE 1000 pump.

If required, select the appropriate differential pressure transducer according to the size indicated.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

380-500V / 3ph / 50Hz with IE5 efficiency up to 7.5kW 380-480V / 3ph / 50Hz from 11kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites



# CATEGORY 1 - TPE SERIES 1000 SINGLE STAGE SINGLE HEAD IN LINE PUMPS

# SERIES 1000 CAST IRON PUMPS COMPLETE WITH 2 POLES VARIABLE SPEED ELECTRIC MOTOR

						230V 1p	oh 50/60Hz	380-480/500	V 3ph 50/60Hz
	P2	PN	Pipework	Transducer	Design	£	Product Code	£	Product Code
Model	kW	bar	Connection	Range	series	AF	A BQQE	AFA	BQQE
TPE 25-50/2 R**	0.12	10	1"1/2 BSPM	0-1 bar	100	1,961	98525613	-	-
TPE 25-80/2 R**	0.18	10	1"1/2 BSPM	0-1 bar	100	2,086	98525614	-	-
TPE 25-90/2 R**	0.37	10	1"1/2 BSPM	0-1.6 bar	100	2,367	98076621	-	-
						A O	A BQQE		
TPE 32-50/2 R**	0.12	10	2" BSPM	0-1 bar	100	2,120	98525615	-	-
TPE 32-80/2 R**	0.25	10	2" BSPM	0-1 bar	100	2,350	98112498	-	-
TPE 32-90/2 R**	0.37	10	2" BSPM	0-1.6 bar	100	2,493	98112501	-	-
						A F /	A BQQE		
TPE 32-230/2	0.75	6/10	32mm Flanged	0-4 bar	200	3,160	99114823	3,653	98902601
TPE 32-200/2	1.1	16	32mm Flanged	0-4 bar	300	3,384	98514289	3,876	98514344
TPE 32-250/2	1.5	16	32mm Flanged	0-4 bar	300	3,555	99134541	4,204	98112536
TPE 32-320/2	2.2	16	32mm Flanged	0-4 bar	300	-	-	4,773	98112558
TPE 32-380/2	3	16	32mm Flanged	0-6 bar	300		-	5,374	99113926
TPE 32-460/2	4	16	32mm Flanged	0-6 bar	300	-	-	5,847	99113927
TPE 32-580/2	5.5	16	32mm Flanged	0-10 bar	300			6,889	99113928
TPE 40-50/2	0.12	6/10	40mm Flanged	0-1 bar	100	2,318	98525620		-
TPE 40-80/2	0.25	6/10	40mm Flanged	0-1 bar	100	2,643	98112571	-	-
TPE 40-90/2	0.37	6/10	40mm Flanged	0-1.6 bar	100	2,786	98112574	-	-
TPE 40-270/2	1.5	6/10	40mm Flanged	0-4 bar	200	3,539	99134427	4,188	98920110
TPE 40-300/2	3	16	40mm Flanged	0-4 bar	300	-	-	5,473	99113929
TPE 40-360/2	4	16	40mm Flanged	0-6 bar	300	-	-	6,215	99113930
TPE 40-430/2	5.5	16	40mm Flanged	0-6 bar	300	-	-	7,526	99113931
TPE 40-530/2	7.5	16	40mm Flanged	0-10 bar	300	-	-	8,560	99113933
TPE 40-630/2	11	16	40mm Flanged	0-10 bar	300		-	11,668	99113935
TPE 50-290/2	3	16	50mm Flanged	0-4 bar	300			5,498	99113936
TPE 50-360/2	4	16	50mm Flanged	0-6 bar	300		-	6,288	99113937
TPE 50-430/2	5.5	16	50mm Flanged	0-6 bar	300			7,694	99113938
TPE 50-420/2	7.5	16	50mm Flanged	0-6 bar	300			8,659	99113939
TPE 50-540/2	11	16	50mm Flanged	0-10 bar	300	-	-	11,771	99113940
TPE 50-630/2	15	16	50mm Flanged	0-10 bar	300	-	-	13,117	98742800
TPE 50-710/2	15	16	50mm Flanged	0-10 bar	300		-	13,117	96096440
TPE 50-830/2	18.5	16	50mm Flanged	0-10 bar	300	-	-	15,985	96096441
TPE 50-900/2	22	16	50mm Flanged	0-16 bar	300		-	18,173	96096442
						-			
TPE 65-210/2	3	16	65mm Flanged	0-4 bar	300	-	-	5,522	99113941
TPE 65-250/2	4	16	65mm Flanged	0-4 bar	300	-	-	6,304	99113942
TPE 65-340/2	5.5	16	65mm Flanged	0-4 bar	300	-	-	7,773	99113943
TPE 65-410/2	7.5	16	65mm Flanged	0-6 bar	300	-	-	8,757	99113945
TPE 65-460/2	11	16	65mm Flanged	0-6 bar	300	-	-	11,869	99113946
TPE 65-550/2	15	16	65mm Flanged	0-10 bar	300	-	-	13,901	96096605
TPE 65-660/2	18.5	16	65mm Flanged	0-10 bar	300	-	-	16,523	96096606
TPE 65-720/2	22	16	65mm Flanged	0-10 bar	300	-	-	18,531	96096607
TPE 80-180/2	3	16	80mm Flanged	0-2.5 bar	300			5,719	99113947
TPE 80-210/2	4	16	80mm Flanged	0-2.5 bar	300			6,465	99113948
TPE 80-240/2	5.5	16	80mm Flanged	0-4 bar	300		<del></del>	7,073	99113949
TPE 80-250/2	7.5	16	80mm Flanged	0-4 bar	300		<del></del>	8,856	99113950
TPE 80-230/2	11	16	80mm Flanged	0-4 bar	300		<del></del>	12,013	99113951
TPE 80-400/2	15	16	80mm Flanged	0-6 bar	300	<u>-</u>	<del></del>	13,038	96110065
TPE 80-520/2	18.5	16	80mm Flanged	0-0 bar	300		<del></del> _	15,906	96110066
TPE 80-520/2	22	16	80mm Flanged	0-10 bar	300		<u> </u>	18,858	96110067
11 L 00-3/0/2	22	10	oviiiiii Fidiiged	O-TO DQI	300		-	10,030	30110007

### **SERIES 1000 TPE PUMPS**

Pumps marked /2  $R^{**}$  require optional union sets -- details of which are on Page 31

Transducers are not included with the pump but are optional extras listed on Page 39. One transducer is required for a single TPE 1000 pump.

If required, select the appropriate differential pressure transducer according to the size indicated.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency up to 11kW 380-480V / 3ph / 50Hz from 15kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES



# **CATEGORY 1 - TPE SERIES 1000 SINGLE STAGE SINGLE HEAD IN LINE PUMPS**

### SERIES 1000 CAST IRON PUMPS COMPLETE WITH 2 POLES VARIABLE SPEED ELECTRIC MOTOR

							380-480/500	V 3ph 50/60Hz
	P2	PN	Pipework	Transducer	Design		£	Product Code
Model	kW	bar	Connection	Range	series		AI F	A BQQE
TPE 100-120/2	2.2	6	100mm Flanged	0-1.6 bar	200	 	6,170	98958246
,						 	AFA	BQQE
TPE 100-160/2	4	16	100mm Flanged	0-2.5 bar	300	 	6,297	99113952
TPE 100-200/2	5.5	16	100mm Flanged	0-4 bar	300	 	7,509	99113964
TPE 100-240/2	7.5	16	100mm Flanged	0-4 bar	300	 	8,455	99113965
TPE 100-250/2	11	16	100mm Flanged	0-4 bar	300	 	12,209	99113966
TPE 100-310/2	15	16	100mm Flanged	0-4 bar	300	 	14,000	96110297
TPE 100-360/2	18.5	16	100mm Flanged	0-6 bar	300	 	16,820	96110298
TPE 100-390/2	22	16	100mm Flanged	0-6 bar	300	 	19,055	96110299
	•	•	•	•	•			
TPE 125-310/2	22	16	125mm Flanged	0-6 bar	300		18,007	99147952

### **SERIES 1000 TPE PUMPS**

Transducers are not included with the pump but are optional extras listed on Page 39. One transducer is required for a single TPE 1000 pump. If required, select the appropriate differential pressure transducer according to the size indicated.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

380-500V / 3ph / 50Hz with IE5 efficiency up to 11kW 380-480V / 3ph / 50Hz from 15kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details. This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES





### SERIES 1000 CAST IRON PUMPS COMPLETE WITH 4 POLES VARIABLE SPEED ELECTRIC MOTOR 380-480/500V 3ph 50Hz P2 PΝ Pipework Transducer Product Code Design A F A BQQE kW Model bar Connection Range series TPED 65-240/4 65mm Flanged 99114625 4 16 0-4 bar 300 13,738 TPED 80-150/4 16 80mm Flanged 0-2.5 bar 300 12,158 99114626 TPED 80-170/4 80mm Flanged 16 0-2.5 bar 300 14,602 99114627 TPED 80-240/4 5.5 80mm Flanged 0-4 bar 300 17,105 99114628 16 TPED 80-270/4 7.5 16 80mm Flanged 0-4 bar 300 19,264 99114629 TPED 80-340/4 11 16 80mm Flanged 0-4 bar 300 24,088 96110246 A F A BOOE TPED 100-65/4 1.1 16 100mm Flanged 0-1 bar 300 10,994 99476475 TPED 100-70/4 16 100mm Flanged 0-1 bar 300 11,383 99114630 TPED 100-90/4 2.2 16 100mm Flanged 0-1.6 bar 300 12,781 99114631 TPED 100-110/4 100mm Flanged 300 3 16 0-1.6 bar 14,109 99114632 TPED 100-130/4 4 16 100mm Flanged 0-2.5 bar 300 15.922 99114633 TPED 100-170/4 5.5 16 100mm Flanged 0-2.5 bar 300 18.070 99114634 100mm Flanged TPED 100-200/4 7.5 16 0-2.5 bar 300 POA 99114635 0-4 bar TPED 100-250/4 11 16 100mm Flanged 300 POA 96110473 TPED 100-330/4 15 16 100mm Flanged 0-4 bar 300 POA 96110474 125mm Flanged TPED 125-110/4 16 0-1.6 bar 300 16,326 99114636 125mm Flanged TPED 125-130/4 5.5 16 0-1.6 bar 300 18,379 99114637 TPED 125-160/4 16 125mm Flanged 0-2.5 bar 300 POA 99114638 POA 98743760 TPED 125-190/4 0-4 bar 300 11 16 125mm Flanged TPED 125-230/4 15 16 125mm Flanged 0-4 bar 300 POA 98743718 TPED 150-130/4 7.5 16 150mm Flanged 0-1.6 bar 300 POA 99114639 TPED 150-160/4 11 16 150mm Flanged 0-2.5 bar POA 96110661 300 TPED 150-200/4 16 150mm Flanged 300 POA 96110662

### **SERIES 1000 TPED PUMPS**

Transducers are not included with the pump but are optional extras listed on Page 39.

If required, select the appropriate differential pressure transducer according to the size indicated.

Two transducers are required for a Twin TPED Series 1000 pump.

The extra fittings kit will allow two differential pressure transducers to be fitted on to the suction and discharge flanges - see page 39

CATEGORY 1 - TPE SERIES 1000 SINGLE STAGE TWIN HEAD IN LINE PUMPS

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

380-500V / 3ph / 50Hz with IE5 efficiency up to 7.5kW 380-480V / 3ph / 50Hz from 11kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES





### CATEGORY 1 - TPE SERIES 1000 SINGLE STAGE TWIN HEAD IN LINE PUMPS

# SERIES 1000 CAST IRON PUMPS COMPLETE WITH 2 POLES VARIABLE SPEED ELECTRIC MOTOR

						230V 1	1ph 50Hz	380-480/50	00V 3ph 50Hz
	P2	PN	Pipework	Transducer	Design	£	Product Code	£	Product Code
Model	kW	bar	Connection	Range	series	A F A	A BQQE	AFA	BQQE
TPED 32-230/2	0.75	6/10	32mm Flanged	0-4 bar	200	6,153	99114820	7,139	99114829
TPED 32-200/2	1.1	16	32mm Flanged	0-4 bar	300	6,727	98512481	7,713	98512486
TPED 32-250/2	1.5	16	32mm Flanged	0-4 bar	300	6,993	99134547	8,370	98112529
TPED 32-320/2	2.2	16	32mm Flanged	0-4 bar	300	-	-	9,496	98112551
TPED 32-380/2	3	16	32mm Flanged	0-6 bar	300	-	-	10,702	99114598
TPED 32-460/2	4	16	32mm Flanged	0-6 bar	300	-	-	11,642	99114599
TPED 32-580/2	5.5	16	32mm Flanged	0-10 bar	300	-	-	13,718	99114600
TPED 40-270/2	1.5	6/10	40mm Flanged	0-4 bar	200	6,800	99134431	8,176	99238980
TPED 40-300/2	3	16	40mm Flanged	0-4 bar	300	-	-	10,893	99114601
TPED 40-360/2	4	16	40mm Flanged	0-6 bar	300	-	-	12,368	99114602
TPED 40-430/2	5.5	16	40mm Flanged	0-6 bar	300	-	-	14,673	99114603
TPED 40-530/2	7.5	16	40mm Flanged	0-10 bar	300	-	-	16,714	99114604
TPED 40-630/2	11	16	40mm Flanged	0-10 bar	300	-	-	POA	99114605
									•
TPED 50-290/2	3	16	50mm Flanged	0-4 bar	300	-	-	10,942	99114606
TPED 50-360/2	4	16	50mm Flanged	0-6 bar	300	-	-	12,515	99114607
TPED 50-430/2	5.5	16	50mm Flanged	0-6 bar	300	-	-	15,308	99114608
TPED 50-420/2	7.5	16	50mm Flanged	0-6 bar	300		-	16,901	99114609
TPED 50-540/2	11	16	50mm Flanged	0-10 bar	300	-	•	POA	99114610
TPED 50-630/2	15	16	50mm Flanged	0-10 bar	300	-	•	POA	98742809
TPED 50-710/2	15	16	50mm Flanged	0-10 bar	300	-	-	POA	96096500
TPED 50-830/2	18.5	16	50mm Flanged	0-10 bar	300		-	POA	96096501
TPED 50-900/2	22	16	50mm Flanged	0-16 bar	300		-	POA	96096502
									0000000
TPED 65-210/2	3	16	65mm Flanged	0-4 bar	300		-	10,991	99114611
TPED 65-250/2	4	16	65mm Flanged	0-4 bar	300	-	-	12,545	99114612
TPED 65-340/2	5.5	16	65mm Flanged	0-4 bar	300			15,465	99114613
TPED 65-410/2	7.5	16	65mm Flanged	0-6 bar	300		-	17,426	99114614
TPED 65-460/2	11	16	65mm Flanged	0-6 bar	300			POA	99114615
TPED 65-550/2	15	16	65mm Flanged	0-10 bar	300			POA	96096659
TPED 65-660/2	18.5	16	65mm Flanged	0-10 bar	300			POA	96096660
TPED 65-720/2	22	16	65mm Flanged	0-10 bar	300	-	-	POA	96096661
11 LD 03 7 LOJ L			osiiiii i langea	0 10 501	300	-		104	30030001
TPED 80-180/2	3	16	80mm Flanged	0-2.5 bar	300			11,378	99114616
TPED 80-210/2	4	16	80mm Flanged	0-2.5 bar	300		-	12,860	99114617
TPED 80-240/2	5.5	16	80mm Flanged	0-2.5 bar	300		<u> </u>	13,810	99114618
TPED 80-250/2	7.5	16	80mm Flanged	0-4 bar	300			17,623	99114619
TPED 80-230/2	11	16	80mm Flanged	0-4 bar	300			POA	99114620
TPED 80-330/2	15	16	80mm Flanged	0-6 bar	300	<del></del>	<del></del>	POA	96110128
TPED 80-400/2	18.5	16	80mm Flanged	0-10 bar	300			POA	96110129
TPED 80-520/2	22	16	80mm Flanged	0-10 bar	300		<u> </u>	POA	96110129
TPED 80-570/2	22	10	80mm Flangeu	0-10 par	300		<u> </u>		4 BQQE
TDED 100 120/2	2.2	6	100mm Flanged	0.1.C hor	200				
TPED 100-120/2	2.2	ь	100mm Flanged	0-1.6 bar	200	-	<u> </u>	10,503	98958243 BQQE
TDED 100 100/2	4	1.0	100mm Flance-	0.2 F box	300				99114621
TPED 100-160/2	4	16	100mm Flanged	0-2.5 bar		-		10,995	
TPED 100-200/2	5.5	16	100mm Flanged	0-4 bar	300	-	-	13,111	99114622
TPED 100-240/2	7.5	16	100mm Flanged	0-4 bar	300		<u> </u>	14,763	99114623
TPED 100-250/2	11	16	100mm Flanged	0-4 bar	300		-	POA	99114624
TPED 100-310/2	15	16	100mm Flanged	0-4 bar	300		-	POA	96110346
TPED 100-360/2	18.5	16	100mm Flanged	0-6 bar	300		-	POA	96110347
TPED 100-390/2	22	16	100mm Flanged	0-6 bar	300		-	POA	96110348

### SERIES 1000 TPED PUMPS

Standard variable speed TPED pump casings are cast iron with heating and glycol seal options.

DP Transducers are not included with the pump but are optional extras listed on Page 39.

If required, select the appropriate sensor according to the size indicated  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

Two transducers are required for a Twin TPED Series 1000 pump  $\,$ 

The extra fittings kit will allow two differential pressure transducers to be fitted on to the suction and discharge flanges - see page 39

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

220-240V / 1ph / 50Hz with IE5 efficiency 380-500V / 3ph / 50Hz with IE5 efficiency up to 11kW 380-480V / 3ph / 50Hz from 15kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details. This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES



# **CATEGORY 1 - TPE SERIES 2000 SINGLE STAGE SINGLE HEAD IN LINE PUMPS**

# SERIES 2000 CAST IRON PUMPS COMPLETE WITH 4 POLES VARIABLE SPEED ELECTRIC MOTOR AND INTEGRAL SENSOR

							380-480/50	0V 3ph 50Hz
	P2	PN	Pipework	Design			£	Product Code
Model	kW	bar	Connection	series			AFA	BQQE
TPE 65-240/4-S	4	16	65mm Flanged	300			7,921	99114825
TPE 80-150/4-S	3	16	80mm Flanged	300			7,125	99114826
TPE 80-170/4-S	4	16	80mm Flanged	300			8,357	99114830
TPE 80-240/4-S	5.5	16	80mm Flanged	300			9,615	99114831
TPE 80-270/4-S	7.5	16	80mm Flanged	300			10,699	99114832
TPE 80-340/4-S	11	16	80mm Flanged	300	 		13,278	96275968
TPE 100-65/4-S	1.1	16	100mm Flanged	300	 		6,550	99478030
TPE 100-70/4-S	1.5	16	100mm Flanged	300	 		6,744	99114813
TPE 100-90/4-S	2.2	16	100mm Flanged	300	 		7,448	99114815
TPE 100-110/4-S	3	16	100mm Flanged	300			8,110	99114816
TPE 100-130/4-S	4	16	100mm Flanged	300	 		9,023	99114811
TPE 100-170/4-S	5.5	16	100mm Flanged	300	 		10,317	99114812
TPE 100-200/4-S	7.5	16	100mm Flanged	300	 		11,635	99114808
TPE 100-250/4-S	11	16	100mm Flanged	300			14,355	96276046
TPE 100-330/4-S	15	16	100mm Flanged	300	 		16,333	96276052
							_	
							_	
TPE 125-60/4-S	2.2	16	125mm Flanged	300			7,490	99114752
TPE 125-80/4-S	3	16	125mm Flanged	300			8,330	99114806
TPE 125-95/4-S	4	16	125mm Flanged	300			9,375	99114807
TPE 125-110/4-S	4	16	125mm Flanged	300	 		9,435	99114726
TPE 125-130/4-S	5.5	16	125mm Flanged	300	 		10,482	99114727
TPE 125-160/4-S	7.5	16	125mm Flanged	300	 		12,989	99114728
TPE 125-190/4-S	11	16	125mm Flanged	300	 		14,898	98743757
TPE 125-230/4-S	15	16	125mm Flanged	300	 		16,710	98743715
					 		_	
TPE 150-70/4-S	5.5	16	150mm Flanged	300	 		11,123	99114732
TPE 150-110/4-S	7.5	16	150mm Flanged	300	 		13,693	99114733
TPE 150-130/4-S	7.5	16	150mm Flanged	300	 		13,803	99114734
TPE 150-155/4-S	11	16	150mm Flanged	300	 		15,916	98908279
TPE 150-170/4-S	15	16	150mm Flanged	300	 		17,607	98908258
TPE 150-200/4-S	15	16	150mm Flanged	300	 		17,794	96382690
					 		<u> </u>	
TDF 200 F0/4 C		16	200 51 1	200	 		44.545	00444000
TPE 200-50/4-S	5.5	16 16	200mm Flanged	300 300	 		11,645	99114833 99114834
TPE 200-70/4-S	7.5		200mm Flanged 200mm Flanged		 		13,100	
TPE 200-90/4-S		16	200mm Flanged 200mm Flanged	300	 		15,656	99114835
TPE 200-130/4-S	11	16		300	 		18,743	97927581
TPE 200-150/4-S	15 15	16 16	200mm Flanged	300 300	 		20,232	97927580 97927586
TPE 200-160/4-S	12	10	200mm Flanged	300	 		20,232	9/92/586
					 		<u> </u>	

### SERIES 2000 TPE PUMPS

These pumps are supplied with a single differential pressure transducer and are pre-programmed for close loop control.

These units are NOT RECOMMENDED for % speed change (uncontrolled mode) from an external analogue source (BMS). Use TPE2 or TPE series 1000 for this application.

These units are NOT SUITABLE for systems where power on/off control is a function of the plant room control. Digital stop/start is acceptable.

### **ELECTRIC MOTOR**

380-500V / 3ph / 50Hz with IE5 efficiency up to 7.5kW 380-480V / 3ph / 50Hz from 11kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites.

### BASEPLATES



# **CATEGORY 1 - TPE SERIES 2000 SINGLE STAGE SINGLE HEAD IN LINE PUMPS**

# SERIES 2000 CAST IRON PUMPS COMPLETE WITH 2 POLES VARIABLE SPEED ELECTRIC MOTOR AND INTEGRAL SENSOR

					230	V 1ph 50Hz	380-480/50	0V 3ph 50Hz
	P2	PN	Pipework	Design	£	Product Code	£	Product Code
Model	kW	bar	Connection	series	Α	F A BQQE	AFA	BQQE
TPE 32-230/2-S	0.75	6/10	32mm Flanged	200	4,254	99133750	4,781	99133770
TPE 32-200/2-S	1.1	16	32mm Flanged	300	4,399	99133585	4,892	99133562
TPE 32-250/2-S	1.5	16	32mm Flanged	300	4,569	99133586	5,220	99133573
TPE 32-320/2-S	2.2	16	32mm Flanged	300		-	5,788	99133574
TPE 32-380/2-S	3	16	32mm Flanged	300		-	6,389	99114655
TPE 32-460/2-S	4	16	32mm Flanged	300		-	6,863	99114656
TPE 32-580/2-S	5.5	16	32mm Flanged	300		-	7,904	99114657
-								
TPE 40-270/2-S	1.5	6/10	40mm Flanged	200	4,553	99134456	5,203	99133662
TPE 40-300/2-S	3	16	40mm Flanged	300	<u> </u>	-	6,488	99114658
TPE 40-360/2-S	4	16	40mm Flanged	300		-	7,230	99114659
TPE 40-430/2-S	5.5	16	40mm Flanged	300	<u> </u>	-	8,541	99114660
TPE 40-530/2-S	7.5	16	40mm Flanged	300	<u> </u>		9,575	99114661
TPE 40-630/2-S	11	16	40mm Flanged	300	-	-	12,683	99114662
						<u> </u>	·	
TPE 50-290/2-S	3	16	50mm Flanged	300	-	-	6,514	99114663
TPE 50-360/2-S	4	16	50mm Flanged	300	-	=	7,302	99114664
TPE 50-430/2-S	5.5	16	50mm Flanged	300	-	-	8,708	99114665
TPE 50-420/2-S	7.5	16	50mm Flanged	300	-	-	9,674	99114666
TPE 50-540/2-S	11	16	50mm Flanged	300	-	-	12,785	99114668
TPE 50-630/2-S	15	16	50mm Flanged	300	-	-	14,131	98742806
TPE 50-710/2-S	15	16	50mm Flanged	300		-	14,131	96397037
TPE 50-830/2-S	18.5	16	50mm Flanged	300		-	17,000	96397040
TPE 50-900/2-S	22	16	50mm Flanged	300		-	19,187	96397043
-								
TPE 65-210/2-S	3	16	65mm Flanged	300		-	6,537	99114669
TPE 65-250/2-S	4	16	65mm Flanged	300	-	-	7,319	99114670
TPE 65-340/2-S	5.5	16	65mm Flanged	300	-	-	8,787	99114671
TPE 65-410/2-S	7.5	16	65mm Flanged	300		-	9,773	99114672
TPE 65-460/2-S	11	16	65mm Flanged	300	-	-	12,883	99114673
TPE 65-550/2-S	15	16	65mm Flanged	300	-	-	14,917	96397049
TPE 65-660/2-S	18.5	16	65mm Flanged	300	-	-	17,539	96397052
TPE 65-720/2-S	22	16	65mm Flanged	300		-	19,545	96397055
,								
TPE 80-180/2-S	3	16	80mm Flanged	300	-	-	6,735	99114674
TPE 80-210/2-S	4	16	80mm Flanged	300	-	-	7,480	99114719
TPE 80-240/2-S	5.5	16	80mm Flanged	300	-	-	8,088	99114720
TPE 80-250/2-S	7.5	16	80mm Flanged	300	-	-	9,871	99114721
TPE 80-330/2-S	11	16	80mm Flanged	300	-	-	13,029	99114722
TPE 80-400/2-S	15	16	80mm Flanged	300	-	-	14,053	96275644
TPE 80-520/2-S	18.5	16	80mm Flanged	300		-	16,920	96397058
TPE 80-570/2-S	22	16	80mm Flanged	300		-	19,874	96397061
-							AIFA	BQQE
TPE 100-120/2-S	2.2	6	100mm Flanged	200		-	7,345	99133670
-			-				AFA	BQQE
TPE 100-160/2-S	4	16	100mm Flanged	300		-	7,312	99114836
TPE 100-200/2-S	5.5	16	100mm Flanged	300		-	8,525	99114837
TPE 100-240/2-S	7.5	16	100mm Flanged	300		-	9,470	99114838
TPE 100-250/2-S	11	16	100mm Flanged	300		-	13,225	99114824
TPE 100-310/2-S	15	16	100mm Flanged	300	<del>-</del> -	-	15,016	96275686
TPE 100-360/2-S	18.5	16	100mm Flanged	300		-	17,834	96275692
TPE 100-390/2-S	22	16	100mm Flanged	300		_	20,071	96275698

### SERIES 2000 TPE PUMPS

These pumps are supplied with a single differential pressure transducer and are pre-programmed for close loop control.

These units are NOT RECOMMENDED for % speed change (uncontrolled mode) from an external analogue source (BMS). Use TPE2 or TPE series 1000 for this application.

 $These \ units \ are \ NOT \ SUITABLE \ for \ systems \ where \ power \ on/off \ control \ is \ a \ function \ of \ the \ plant \ room \ control. \ Digital \ stop/start \ is \ acceptable.$ 

### **ELECTRIC MOTOR**

380-500V / 3ph / 50Hz with IE5 efficiency up to 11kW 380-480V / 3ph / 50Hz from 15kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details. This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES



# **CATEGORY 1 - TPED SERIES 2000 SINGLE STAGE TWIN HEAD IN LINE PUMPS**

### SERIES 2000 CAST IRON PUMPS COMPLETE WITH 4 POLES VARIABLE SPEED ELECTRIC MOTOR AND INTEGRAL SENSOR

						380-480/50	00V 3ph 50Hz
	P2	PN	Pipework	Design		£	Product Code
Model	kW	bar	Connection	series		AFA	A BQQE
TPED 65-240/4-S	4	16	65mm Flanged	300		14,753	99132851
TPED 80-150/4-S	3	16	80mm Flanged	300	<del></del>	13,173	99132853
TPED 80-170/4-S	4	16	80mm Flanged	300		15,617	99132855
TPED 80-240/4-S	5.5	16	80mm Flanged	300		18,119	99132856
TPED 80-270/4-S	7.5	16	80mm Flanged	300		POA	99132857
TPED 80-340/4-S	11	16	80mm Flanged	300		POA	96945801
TPED 100-65/4-S	1.1	16	100mm Flanged	300		12,009	99478033
TPED 100-70/4-S	1.5	16	100mm Flanged	300		12,398	99132858
TPED 100-90/4-S	2.2	16	100mm Flanged	300		13,796	99132859
TPED 100-110/4-S	3	16	100mm Flanged	300		15,124	99132860
TPED 100-130/4-S	4	16	100mm Flanged	300		16,938	99132861
TPED 100-170/4-S	5.5	16	100mm Flanged	300		19,085	99132862
TPED 100-200/4-S	7.5	16	100mm Flanged	300		POA	99132863
TPED 100-250/4-S	11	16	100mm Flanged	300		POA	96945808
TPED 100-330/4-S	15	16	100mm Flanged	300		POA	96945815
TPED 125-110/4-S	4	16	125mm Flanged	300		17,342	99132864
TPED 125-130/4-S	5.5	16	125mm Flanged	300		19,394	99132865
TPED 125-160/4-S	7.5	16	125mm Flanged	300		POA	99132866
TPED 125-190/4-S	11	16	125mm Flanged	300		POA	98743766
TPED 125-230/4-S	15	16	125mm Flanged	300		POA	98743724
TPED 150-130/4-S	7.5	16	150mm Flanged	300		POA	99132868
TPED 150-160/4-S	11	16	150mm Flanged	300	<del></del>	POA	96946129
TPED 150-200/4-S	15	16	150mm Flanged	300		POA	96945832

### **SERIES 2000 TPED PUMPS**

These twin pumps are supplied with a single differential pressure transducer and are pre-programmed for close loop control.

These units are NOT RECOMMENDED for % speed change (uncontrolled mode) from an external analogue source (BMS). Use TPE2 D or TPED series 1000 for this application.

These units are designed for master and slave operation and are NOT SUITABLE for systems where power on/off control is a function of the plant room control.

Digital stop/start to both pump heads simultaneously is acceptable.

If independent pump operation is required then the slave pump must be fitted with na additional differential pressure transducer.

The extra fittings kit will allow two differential pressure transducers to be fitted on to the suction and discharge flanges - see page 39

### ELECTRIC MOTOR

380-500V / 3ph / 50Hz with IE5 efficiency up to 7.5kW 380-480V / 3ph / 50Hz from 11kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### **BASEPLATES**



### **CATEGORY 1 - TPED SERIES 2000 SINGLE STAGE TWIN HEAD IN LINE PUMPS**

### SERIES 2000 CAST IRON PUMPS COMPLETE WITH 2 POLES VARIABLE SPEED ELECTRIC MOTOR AND INTEGRAL SENSOR

					230	V 1ph 50Hz	380-480/50	0V 3ph 50Hz
	P2	PN	Pipework	Design	£	Product Code	£	Product Code
Model	kW	bar	Connection	series	A	F A BQQE	AFA	BQQE
TPED 32-230/2-S	0.75	6/10	32mm Flanged	200	7,168	99133613	8,480	99133609
TPED 32-200/2-S	1.1	16	32mm Flanged	300	7,743	99133596	8,728	99133591
TPED 32-250/2-S	1.5	16	32mm Flanged	300	8,009	99133598	9,386	99133592
TPED 32-320/2-S	2.2	16	32mm Flanged	300		-	10,512	99133593
TPED 32-380/2-S	3	16	32mm Flanged	300		-	11,717	99132803
TPED 32-460/2-S	4	16	32mm Flanged	300		-	12,656	99132804
TPED 32-580/2-S	5.5	16	32mm Flanged	300		-	14,732	99132805
•			<u> </u>				•	
TPED 40-270/2-S	1.5	6/10	40mm Flanged	200	7,815	99134474	9,560	99133715
TPED 40-300/2-S	3	16	40mm Flanged	300	<u> </u>	-	11,908	99132806
TPED 40-360/2-S	4	16	40mm Flanged	300	<u> </u>	-	13,384	99132807
TPED 40-430/2-S	5.5	16	40mm Flanged	300	<u> </u>	-	15,689	99132808
TPED 40-530/2-S	7.5	16	40mm Flanged	300	<u> </u>	-	17,729	99132809
TPED 40-630/2-S	11	16	40mm Flanged	300	<u> </u>	-	POA	99132811
							·	
TPED 50-290/2-S	3	16	50mm Flanged	300	-	-	11,957	99132812
TPED 50-360/2-S	4	16	50mm Flanged	300	-	-	13,531	99132823
TPED 50-430/2-S	5.5	16	50mm Flanged	300	-	-	16,324	99132824
TPED 50-420/2-S	7.5	16	50mm Flanged	300	-	-	17,916	99132825
TPED 50-540/2-S	11	16	50mm Flanged	300		-	POA	99132829
TPED 50-630/2-S	15	16	50mm Flanged	300		-	POA	98742815
TPED 50-710/2-S	15	16	50mm Flanged	300		-	POA	96945769
TPED 50-830/2-S	18.5	16	50mm Flanged	300		-	POA	96945778
TPED 50-900/2-S	22	16	50mm Flanged	300		-	POA	96945790
			_					
TPED 65-210/2-S	3	16	65mm Flanged	300		-	12,006	99132830
TPED 65-250/2-S	4	16	65mm Flanged	300		-	13,560	99132831
TPED 65-340/2-S	5.5	16	65mm Flanged	300		-	16,481	99132832
TPED 65-410/2-S	7.5	16	65mm Flanged	300	-	-	18,442	99132834
TPED 65-460/2-S	11	16	65mm Flanged	300		-	POA	99132835
TPED 65-550/2-S	15	16	65mm Flanged	300		-	POA	96945772
TPED 65-660/2-S	18.5	16	65mm Flanged	300	-	-	POA	96945781
TPED 65-720/2-S	22	16	65mm Flanged	300		-	POA	96945793
TPED 80-180/2-S	3	16	80mm Flanged	300		-	12,394	99132837
TPED 80-210/2-S	4	16	80mm Flanged	300	-	-	13,876	99132838
TPED 80-240/2-S	5.5	16	80mm Flanged	300		-	14,825	99132839
TPED 80-250/2-S	7.5	16	80mm Flanged	300		-	18,639	99132840
TPED 80-330/2-S	11	16	80mm Flanged	300	-	-	POA	99132842
TPED 80-400/2-S	15	16	80mm Flanged	300		-	POA	96945763
TPED 80-520/2-S	18.5	16	80mm Flanged	300	-	-	POA	96945784
TPED 80-570/2-S	22	16	80mm Flanged	300		-	POA	96945797
-							AIFA	BQQE
TPED 100-120/2-S	2.2	6	100mm Flanged	200	-	-	13,510	99133716
-			_				AFA	BQQE
TPED 100-160/2-S	4	16	100mm Flanged	300		-	13,550	99132844
TPED 100-200/2-S	5.5	16	100mm Flanged	300		-	15,961	99132845
TPED 100-240/2-S	7.5	16	100mm Flanged	300		-	17,843	99132847
TPED 100-250/2-S	11	16	100mm Flanged	300	<u> </u>	-	POA	99132849
TPED 100-310/2-S	15	16	100mm Flanged	300		-	POA	96945766
TPED 100-360/2-S	18.5	16	100mm Flanged	300		-	POA	96945775
TPED 100-390/2-S	22	16	100mm Flanged	300		_	POA	96945787

### SERIES 2000 TPED PUMPS

These twin pumps are supplied with a single differential pressure transducer and are pre-programmed for close loop control.

These units are NOT RECOMMENDED for % speed change (uncontrolled mode) from an external analogue source (BMS). Use TPE2 D or TPED series 1000 for this application.

These units are designed for master and slave operation and are NOT SUITABLE for systems where power on/off control is a function of the plant room control.

Digital stop/start to both pump heads simultaneously is acceptable.

If independent pump operation is required then the slave pump must be fitted with na additional differential pressure transducer.

The extra fittings kit will allow two differential pressure transducers to be fitted on to the suction and discharge flanges - see page 39

### **ELECTRIC MOTOR**

380-500V / 3ph / 50Hz with IE5 efficiency up to 11kW 380-480V / 3ph / 50Hz from 15kW and above IP55 Class F insulation

### IMPORTANT:

A Grundfos GO based communication device will be required in order to commission the "E" product. See Page 40 for details.

This device can be used to commission and monitor multiple pumps on multiple sites

### BASEPLATES



### **CATEGORY 1 - ACCESSORIES AND ANCILLARY EQUIPMENT FLANGE SETS - SCREWED UP/MAGNA/TP Product Code** Item Pumps 1¼" BSP Flange Set Obsolete UP36F 509903 1½" BSP Flange Set UP36F 83 509904 2" BSP Flange Set UP36F 509905 84 2" BSP Special Flange Set UPS40 91200212 236 1¼" BSP PN10/16 Flange Set MAGNAx/TP 32 113 539703 1½" BSP PN10/16 Flange Set MAGNAx/TP 40 125 539701 2" BSP PN10/16 Flange Set MAGNAx/TP 50 150 549801 2½" BSP PN10/16 Flange Set MAGNAx/TP 65 559801 170 3" BSP PN6 Flange Set MAGNAx/TP 80 188 569902 3" BSP PN10/16 Flange Set MAGNAx/TP 80 207 569802 4" BSP PN10/16 Flange Set MAGNAx/TP 100 579801 302

FLANGE SETS - WELD NECK		U	P/MAGNA/TP
		£	Product Code
32mm PN10/16 Flange Set	UP/MAGNA/TP 32	Obsolete	539704
40mm PN10/16 Flange Set	UP/MAGNA/TP 40	105	539702
50mm PN10/16 Flange Set	UP/MAGNA/TP 50	132	549802
80mm PN6 Flange Set	UPS80/TP80	63	96569180
80mm PN10/16 Flange Set	TP80	188	569801
100mm PN6 Flange Set	UPS100/TP 100	72	96569181
100mm PN10/16 Flange Set	TP 100	282	579802

Each flange set includes two flanges, two gaskets and two sets of nuts and bolts.

BLANKING PLATES FOR TWIN HEAD PUMPS		
	£	Product Code
MAGNA1 D 25-40/60/80/100/120		
MAGNA1/MAGNA3 D 32-40/60/80/100	67	98159373
MAGNA1/MAGNA3 D 40-40/60		
MAGNA1/MAGNA3 D 32-120		
MAGNA1/MAGNA3 D 40-80/100/120/150/180		
MAGNA1/MAGNA3 D 50-40/60/80/100/120/150/180		
MAGNA1/MAGNA3 D 65-40/60/80/100/120/150	75	98159372
MAGNA1/MAGNA3 D 80-40/60/80/100/120		
MAGNA1/MAGNA3 D 100-40/60/80/100/120		
TPE2 D/TPE3 D all models		
TP(E)D 32/40/50/65	286	96591261
TP(E)D 32/40/50/65/80/100	96	565055
TP(E)D 32/40/50/65/80/100	270	96495694
TP(E)D 32/40/50/80	293	96495695
TP(E)D 50/65	360	96495696
TP(E)D 100/125	293	96525962
TP(E)D 150	804	96525963
TP(E)D 80/100/125	876	96525964

Note: Check the current TP data book for the required blanking plate product code for each pump size.

OPTION	IAL BASEPLATES COMPLETE	WITH HEXAGON SCREWS			
Ref.	Pump types	Pump Series	Design	£	Product Code
B1	TP(E) 32 to 65	Series 200	one square base	82	96591246
B2	TP(E) 65 to 100	Series 200	one square base	253	96591245
В3	TP(E) 32 to 100	Series 300 single head	one square base	157	485031
B4	TP(E) 80 to 150	Series 300 single head	one square base	180	96536246
B5	TP(E)D 32 to 100	Series 300 twin head	two separate baseplate runners	172	96489381
B6	TP(E)D 100	Series 300 twin head	two separate baseplate runners	171	96536247
B7	TP(E)D 80 to 150	Series 300 twin head	two separate baseplate runners	189	96536248
	TPE2 D, TPE3 D 32			206	99150053
	TPE2 D, TPE3 D 40			206	99150054
	TPE2 D, TPE3 D 50			206	99150055
	TPE2 D, TPE3 D 65			206	99150056
	TPE2 D, TPE3 D 80			206	99150056
	TPE2 D, TPE3 D 100			206	99150057

Please consult the data book for specific baseplate product codes for each pump model.

Series 100 pumps have no baseplate option.

Series 200 twin pumps have no baseplate option.

Except foot mounted TP Series 300, all other Series 200 and 300 pumps can have baseplates supplied loose at the extra price as indicated above.

Single head TPE2 and TPE3 are for pipework mounting have no baseplate option.

# **CATEGORY 1 - INSULATION KITS**

# INSULATION KITS FOR UPS2, ALPHA2L AND ALPHA2

Model		£	Product Code
UPS2 and ALPHA2L xx-xx 130	(except ALPHA2L 20-45)	26	505821
UPS3		26	99270706
ALPHAx xx-xx 130		29	98091786

- 1	INICILI ATIONI MITC FOR CINICI F	LIEAD BAACBIAA ABID BAACBI	A3 PUMPS - FOR COOLING APPLICAT	CONC
- 11	INSULATION KITS FOR SINGLE	HEAD MAGNAL AND MAGNA	13 PUIVIPS - FOR COOLING APPLICAT	ICHA2

	MAGNA1		MAGNA3	
	£	Product Code	£	Product Code
MAGNAx 25-40/60/80/100/120 (N)	271	98538852	271	98354534
MAGNAx 32-40/60/80/100/120 (N)	288	98538853	306	98354535
MAGNAx 32-40/60/80/100 F (N)	306	98538854	340	98354536
MAGNAx 32-120 F (N)	306	98164595	323	98063287
MAGNAx 40-40/60 F (N)	356	98538855	356	98354537
MAGNAx 40-80/100 F (N)	356	98164597	356	98063288
MAGNAx 40-120/150/180 F (N)	356	98164598	356	98145675
MAGNAx 50-40/60/80 F (N)	397	98164599	397	98063289
MAGNAx 50-100/120/150/180 F (N)	397	98164600	397	98145676
MAGNAx 65-40/60/80/100/120/150 F (N)	428	98538839	428	96913593
MAGNAx 80-40/60/80/100/120 F	475	98538851	492	98134265
MAGNAx 100-40/60/80/100/120 F	545	98164611	479	96913589

# **INSULATION KITS FOR SINGLE HEAD TPE2 AND TPE3 PUMPS**

	Н	EATING	C	COOLING
	£	Product Code	£	Product Code
TPE2, TPE3 32-80/120/150/180/200	67	98159366	323	98063287
TPE2, TPE3 40-80/120/150/180/200/240	68	98159368	356	98145675
TPE2, TPE3 50-60/80/120/150/180/200/240	86	98159367	397	98145676
TPE2, TPE3 65-60/80/120/150/180/200/240	81	98159361	428	96913593
TPE2, TPE3 80-40/120/150/180	120	98159363	492	98134265
TPE2, TPE3 100-40/120/150/180	147	98159362	479	96913589

Insulation kits are made of expanded polystyrene with good insulation qualities and fit around the pump in two or three pieces.

# **CATEGORY 1 - CONTROL VALVE WITH ACTUATOR AND CONTROLLER**

						MIXIT
	K <sub>VS</sub>		PN			
Model	m³/h	Port sizes	bar		230V 1	ph 50Hz
	·			Pump Ports	L NRV	R NRV
				£	Product Code	Product Code
MIXIT 25-6.3	6.3	G 1" 1/2	10	1664	99508816	99508818
MIXIT 25-10	10	G 1" 1/2	10	1809	99508819	99508820
MIXIT 32-16	16	G 2"	10	2027	99508822	99508834

				Pump Ports	L F	R F
				£	Product Code	Product Code
MIXIT 32-16	16	DN 32	6/10	2315	99508836	99508837
MIXIT 40-25	25	DN 40	6/10	TBA	99508838	99508839
MIXIT 50-40	40	DN 50	6/10	3111	99508840	99508841

Control valve with actuator and built-in controller for temperature control in heating and cooling applications, in tandem with a Magna3 circulator or a TPE3 pumps, in mixing and injection applications as 2 or 3 port valve.

MIXIT is compatible with MAGNA3 model D pumps from production code 1943 (YYWW).

### Include:

Temperature sensors
Flow sensor
Replaceable non-return valve (threaded versions only)
Insulation kit
Grundfos BuildingConnect Free

Software updates are available separately







MIXIT R NRV

			MIXIT SOFTWA	ARE UPGRADES
Model		Temperat	£	Product Code
	1 licence	Physical pack	POA	99558420
MIXIT DYNAMIC	1 licence	Online	POA	99725067
	5 licences	Online	POA	99725068
	1 licence	Physical pack	POA	99558443
MIXIT CONNECT	1 licence	Online	POA	99725069
	5 licences	Online	POA	99725070

# MIXIT DYNAMIC UPGRADE

Pressure independance Heat energy monitor Balancing limiters

### MIXIT CONNECT UPGRADE

Grundfos BuildingConnect Pro BacNet IP, BacNet MS/TP, Modbus TCP, Modbus RTU



				MIXIT A	ACCESSORIES
Model			Temperature	£	Product Code
Outdoor temperature sensor	Danfoss ESMT	PT1000	-30°C to +50°C	29.00	99113175
Insert for outdoor temperature sensor				135.00	99113176
Outdoor temperature sensor	DOL 114	0-10V	-40°C to +60°C	498.00	99113183
Outdorr shield for DOL 114				163.00	99113181
Temperature switch	JUMO		+50°C	163.00	99113180

# **CATEGORY 1 - GRUNDFOS DOMESTIC WASTEWATER PRODUCTS**

# STAINLESS STEEL SUBMERSIBLE SUMP PUMPS



Unilift KP

			230\	/ 1ph 50Hz
Model	Cable length	Level control	£	Product Code
Unilift KP 150 M1	5m	Manual	393	011H6000
Unilift KP 250 M1	5m	Manual	481	012H6000
Unilift KP 350 M1	10m	Manual	567	013N6300
Unilift KP 150 A1	5m	Float switch	413	011H6600
Unilift KP 250 A1	5m	Float switch	498	012H6600
Unilift KP 350 A1	10m	Float switch	608	013N6800
Unilift KP 150 AV1	5m	Vertical level switch	441	011H6400
Unilift KP 250 AV1	5m	Vertical level switch	530	012H6400
Unilift KP 350 AV1	10m	Vertical level switch	694	013N7900

### Unilift KP AV1 models are for use with clean water only

			110V	110V 1ph 50Hz	
			£	Product Code	
Unilift KP 250 A1	5m	Float switch	548	012C6700	

# ACCESSORIES UNILIFT KP

	£	<b>Product Code</b>
10 Metre Hose Kit comprising 1¼" lay flat hose and fittings	300	99110020
Non-Return Valve (single)	27	97825322
Non-Return Valve (pack of 10)	55	96578978
Float Switch c/w 3 metres of cable	120	16650
Float Switch c/w 5 metres of cable	133	96590429
Float Switch c/w 10 metres of cable	143	96590420

# MULTI-PURPOSE COMPOSITE SUBMERSIBLE DRAINAGE PUMP

**UNILIFT CC** 

**UNILIFT KP** 



Unilift CC

			240V 1ph 50Hz		
Model		Level control	£	Product Code	
Unilift CC 5 M1	5m	Manual	237	96280977	
Unilift CC 7 M1	10m	Manual	287	96280979	
Unilift CC 9 M1	10m	Manual	365	96280981	
Unilift CC 5 A1	5m	Float switch	253	96280978	
Unilift CC 7 A1	10m	Float switch	300	96280980	
Unilift CC 9 A1	10m	Float switch	386	96280982	





Multibox CC

	£	<b>Product Code</b>
Multibox CC 7 A-1 (a boxed Unilift CC 7, c/w 10m lay flat hose and fittings)	718	97519841

CERATORS			SOLOLIFT2
		230-24	0V 1ph 50Hz
WC-3	Model	£	Product Code
	SOLOLIFT2 WC-1	POA	97775329
	Behind the toilet' Macerator for the efficient removal of wastewar	ter from a single	
91	toilet and sink.		
C-1	SOLOLIFT2 WC-3	POA	97775330
	Behind the toilet Macerator for the efficient removal of wastewat	er from a toilet,	
	sink and shower. Please contact Grundfos regarding a bath installa	ation.	
CWC-3	SOLOLIFT2 CWC-3	POA	97775331
6	Macerator for the efficient removal of wastewater from a wall hu	ng toilet, sink,	
1	shower and bidet. Please contact Grundfos regarding a bath instal	lation.	
1	SOLOLIFT2 C-3	POA	97775332
9	For the efficient removal of wastewater from a dish washer & was	hing machine,	
	sink and bath.		
D-2	SOLOLIFT2 D-2	POA	97775333
	For the efficient removal of wastewater from a shower and sink.		

Accessories	for unit		£	Product Code
Drain hose	WC-1 WC-3	Allows drain down of unit. Must be fitted during installation.	43	97789093
Hose for Unit Replacement	All units	Length 0.5m, for replacing other manufacturers products.	56	97772316
Alarm PCB	WC-1/3 CWC-3	Audible indication of excessive running time due to blockage.	112	97772315
Pipe reducer inlet/outlet	All units	Reducer converts 1 1/2" connection to 1 1/4" (36mm OD pipe)	38	97775336
Additional inlet kit D40/40/32	D-2	Flexible reducer, connects 1 1/2" pipe to 2nd inlet on D2	48	97775334

Unilift AP 35

VINLESS STEE	L SUBMERSIBLE SUMP F	PUMPS				UNILIFT AP
					240V	1ph 50Hz
	Model	P2 (kW)	Discharge	Level control	£	Product Code
	Unilift AP 12.40.04.1	0.40	Rp 1" ½	Manual	1,110	96011014
	Unilift AP 12.40.06.1	0.60	Rp 1" ½	Manual	1,162	96001732
	Unilift AP 12.40.08.1	0.80	Rp 1" ½	Manual	1,313	96001873
	Unilift AP 12.50.11.1	1.10	Rp 2"	Manual	1,851	96001962
A	Unilift AP 12.40.04.A1	0.40	Rp 1" ½	Float switch	1,203	96404179
	Unilift AP 12.40.06.A1	0.60	Rp 1" ½	Float switch	1,281	96404180
	Unilift AP 12.40.08.A1	0.80	Rp 1" ½	Float switch	1,439	96404181
F (3)	Unilift AP 12.50.11.A1	1.10	Rp 2"	Float switch	2,003	96404182
	Unilift AP 35.40.06.1	0.60	Rp 1" ½	Manual	1,324	96001808
	Unilift AP 35.40.08.1	0.80	Rp 1" ½	Manual	1,450	96001894
00	Unilift AP 35.40.06.A1	0.60	Rp 1" ½	Float switch	1,731	96404183
	Unilift AP 35.40.08.A1	0.80	Rp 1" ½	Float switch	1,563	96404184
Jnilift AP 35						
	Unilift AP 50.50.08.1	0.80	Rp 2"	Manual	1,904	96010599
	Unilift AP 50.50.11.1	1.10	Rp 2"	Manual	2,876	96010581
	Unilift AP 50.50.08.A1	0.80	Rp 2"	Float switch	2,078	96404185
	Unilift AP 50.50.11.A1	1.10	Rp 2"	Float switch	3,050	96404186

All single phase models have self-contained starters built into the head of the pump and 10m cable.

Unilift AP 35

WASTE WATER PUMF	PS					UNILIFT A
					415V	3ph 50Hz
Model	P2 (kW)	Discharge	Level control	Starter	£	Product Cod
Unilift AP 12.40.04.3	0.40	Rp 1" ½	Manual	not included	1,075	96011024
Unilift AP 12.40.06.3	0.60	Rp 1" ½	Manual	not included	1,123	96001652
Unilift AP 12.40.08.3	0.80	Rp 1" ½	Manual	not included	1,270	96001791
Unilift AP 12.50.11.3	1.10	Rp 2"	Manual	not included	1,793	96001975
Unilift AP 12.40.04.A3	0.40	Rp 1" ½	Float switch	built-in	1,333	96011025
Unilift AP 12.40.06.A3	0.60	Rp 1" ½	Float switch	built-in	1,415	96010923
Unilift AP 12.40.08.A3	0.80	Rp 1" ½	Float switch	built-in	1,544	96010925
Unilift AP 12.50.11.A3	1.10	Rp 2"	Float switch	built-in	2,076	96010927
Unilift AP 35.40.06.3	0.60	Rp 1" ½	Manual	not included	1,283	96000169
Unilift AP 35.40.08.3	0.80	Rp 1" ½	Manual	not included	1,402	96001718
Unilift AP 50.50.08.3	0.80	Rp 2"	Manual	not included	1,843	96010563
Unilift AP 50.50.11.3	1.10	Rp 2"	Manual	not included	2,793	96010562
Unilift AP 35.40.06.A3	0.60	Rp 1" ½	Float switch	built-in	1,560	96010929
Unilift AP 35.40.08.A3	0.80	Rp 1" ½	Float switch	built-in	1,684	96010931
Unilift AP 50.50.08.A3	0.80	Rp 2"	Float switch	built-in	2,133	96010933
Unilift AP 50.50.11.A3	1.10	Rp 2"	Float switch	built-in	3,083	96010935

All 3 phase units require an external starter. Starters are supplied with all A3 models.

Model

CONLIFT 1 LS condensate removal pump

CONLIFT 1 condensate removal pump

CATEGORY 1 - UNILIFT AP STAINLESS STEEL WASTEWATER PUMPS

# **AUTOMATIC CONDENSATE PUMP**

CONLIFT

**Product Code** 98452219

97936173

240V 1ph 50Hz

POA

POA



Conlift1



Alar

m	РСВ	

Conlift Accessories	£	Product Code
PH + Box	POA	97936176
Hose Ext	POA	97936177
Refill Pack	POA	97936178
Alarm PCB	POA	97936209



PH+ box

# **CATEGORY 1 - DOMESTIC PRESSURE BOOSTING AND SHOWER PUMP PRODUCTS**

# **GRUNDFOS HOME BOOSTERS**





	Maximum Pressure	£	Product Code
Home Booster 3.0 bar*	3.6 bar	POA	MD300200
Home Booster 4.5 bar*	5.6 bar	POA	MD450200
Home Booster Spare/Slave 180L Water Tank *		POA	MCST0200

\* Pallet quantity = 2

UPA 15-90N	1/2" Unions	POA	99539153

# **MAX-E BOOST**

240V 1ph 50Hz	Maximum Pressure	£	Product Code
Max-E Boost	5.0 bar	POA	98536448

### SCALA1





240V 1ph 50Hz	£	Product Code
SCALA1 3-35	Subject to category Cat3B price and discount	99530409
SCALA1 3-45	Subject to category Cat3B price and discount	99530410
SCALA1 5-55	Subject to category Cat3B price and discount	99530412

Sizing – up to three floors and eight standard domestic outlets

\* Pallet quantity = 14

# SCALA2





240V 1ph 50Hz	£	Product Code
SCALA2 3-45 A	Subject to category Cat3B price and discount	98562865

Sizing – up to three floors and eight standard domestic outlets

\* Pallet quantity = 14

### SCALA1/SCALA2 - ACCESSORIES

	£	Product Code
Connection Hose 1 inch RP/ speedfit	POA	97894516

# **GRUNDFOS SHOWER PUMPS**

# WRAS approved product

240V 1ph 50Hz

### **GRUNDFOS SHOWER PUMPS - STR2 POSITIVE HEAD SHOWER BOOSTER**





240V 1ph 50Hz		£	Product Code
Single Impeller Regenerative			
SSR2-2.0 C	2.0 bar	POA	98950218
Twin Impeller Regenerative			
STR2-1.5 C	1.5 bar	POA	98950216
STR2-2.0 C	2.0 bar	POA	98950217
240V 1ph 50Hz		£	Product Code
Universal Single Impeller Regenerative			
SSR2-2.0 CN	2.0 bar	POA	98950231
Universal Twin Impeller Regenerative			
STR2-1.5 CN	1.5 bar	POA	98950219
STR2-2.0 CN	2.0 bar	POA	98950220

# **GRUNDFOS SHOWER PUMPS - AMAZON POSITIVE HEAD SHOWER BOOSTER**



240V 1ph 50Hz		£	Product Code
Positive Single Impeller Brass Heavy Duty Reg	generative		
SSP-2.0 B	2.0 bar	POA	96787450
SSP-3.0 B	3.0 bar	POA	96787464
Positive Twin Impeller Brass Heavy Duty Reg	enerative		
STP-1.5 B	1.5 bar	POA	96787446
STP-2.0 B	2.0 bar	POA	96787462
STP-3.0 B	3.0 bar	POA	96787466
STP-4.0 B	4.0 bar	POA	96787471

# **GRUNDFOS SHOWER PUMPS - AMAZON UNIVERSAL HEAD SHOWER BOOSTER**



240V 1ph 50Hz		£	Product Code
Universal Single Impeller Brass He	avy Duty Regenerative		
SSN-2.0 B	2.0 bar	POA	96787504
SSN-3.0 B	3.0 bar	POA	96787512
Universal Twin Impeller Brass Hea	vy Duty Regenerative		
STN-1.5 B	1.5 bar	POA	96787503
STN-2.0 B	2.0 bar	POA	96787505
STN-3.0 B	3.0 bar	POA	96788173
STN-4.0 B	4.0 bar	POA	96788176

# **GRUNDFOS SHOWER PUMPS - ACCESSORIES**

INIES			
		£	Product Code
Surrey Flange 15mm		POA	98381635
Surrey Flange 22mm		POA	98381636
Surrey Flange 15mm	Box of 10	POA	98381638
Surrey Flange 22mm	Box of 10	POA	98381639
22mm York Flange Deflector		POA	98381637

# **CATEGORY 1 - GRUNDFOS CUE FREQUENCY CONVERTERS WITH RFI FILTER**

# CUE 380-440V 3ph 50Hz IP20 RFI FILTER CATEGORY C1

	Max output		Enclosure type
kW	current (A)	IP rating	
0.55	1.8	IP20	A2
0.75	2.4	IP20	A2
1.1	3	IP20	A2
1.5	4.1	IP20	A2
2.2	5.6	IP20	A2
3	7.2	IP20	A2
4	10	IP20	A2
5.5	13	IP20	A3
7.5	16	IP20	A3
11	24	IP20	B3
15	32	IP20	В3
18.5	37.5	IP20	В3
22	44	IP20	B4
30	61	IP20	B4
37	73	IP20	B4
45	90	IP20	C3
55	106	IP20	C3
75	147	IP20	C4
90	177	IP20	C4

Standard version		
£	Product Code	
955	99616707	
990	99616708	
1,043	99616709	
1,104	99616710	
1,216	99616711	
1,337	99616712	
1,497	99616713	
1,729	99616714	
2,045	99616715	
2,334	99616716	
2,685	99616717	
2,994	99616718	
3,300	99616719	
3,998	99616720	
4,408	99616721	
4,876	99616722	
6,067	99616723	
7,368	99616724	
8,343	99616725	

With Safe To	rque Off option
£	Product Code
1047	99616731
1083	99616733
1145	99616734
1208	99616735
1335	99616736
1466	99616737
1638	99616738
1896	99616739
2242	99616740
2557	99616741
2942	99616742
3278	99616743
3617	99616744
4381	99616745
4828	99616746
5339	99616747
6646	99616748
8069	99616749
9138	99616750

# CUE 380-440V 3ph 50Hz IP21 RFI FILTER CATEGORY C3

type
)
1
1
)
)
1

Standard version	
£	Product Code
9,642	99616726
11,076	99616727
12,893	99616728
15,494	99616729
18,745	99616730

With Safe	With Safe Torque Off option	
£	Product Code	
10561	99616751	
12128	99616752	
14119	99616753	
16967	99616754	
20526	99616755	

# CUE 380-440V 3ph 50Hz IP55 RFI FILTER CATEGORY C1

kW	Max output current (A)	IP rating	Enclosure type
0.55	1.8	IP55	A4
0.75	2.4	IP55	A4
1.1	3	IP55	A4
1.5	4.1	IP55	A4
2.2	5.6	IP55	A4
3	7.2	IP55	A4
4	10	IP55	A4
5.5	13	IP55	A5
7.5	16	IP55	A5
11	24	IP55	B1
15	32	IP55	B1
18.5	37.5	IP55	B1
22	44	IP55	B2
30	61	IP55	B2
37	73	IP55	C1
45	90	IP55	C1
55	106	IP55	C1
75	147	IP55	C2
90	177	IP55	C2

Standard version		
£	Product Code	
1,191	99616756	
1,232	99616757	
1,301	99616758	
1,378	99616759	
1,517	99616760	
1,669	99616761	
1,868	99616762	
2,160	99616763	
2,554	99616764	
2,915	99616765	
3,352	99616766	
3,735	99616767	
4,120	99616769	
4,998	99616770	
5,508	99616771	
6,094	99616772	
7,584	99616773	
9,210	99616774	
10,428	99616775	

With Safe Torque Off option		
£	Product Code	
1791	99616781	
1834	99616782	
1911	99616783	
2001	99616784	
2171	99616785	
2350	99616786	
2570	99616787	
2906	99616788	
3342	99616789	
4037	99616790	
4534	99616791	
5005	99616792	
5472	99616793	
6467	99616794	
7439	99616795	
8176	99616796	
9908	99616797	
12284	99616798	
13747	99616799	

# CUE 380-440V 3ph 50Hz IP54 RFI FILTER CATEGORY C3

kW	Max output current (A)	IP rating	Enclosure type
110	212	IP54	D1h
132	260	IP54	D1h
160	315	IP54	D2h
200	395	IP54	D2h
250	480	IP54	D2h

Standard version		
£	Product Code	
12,054	99616776	
13,841	99616777	
16,117	99616778	
19,366	99616779	
23,430	99616780	

With Safe Torque Off option		
£	Product Code	
18087	99616800	
POA	99616801	
POA	99616802	
POA	99616803	
ΡΩΔ	99616804	

 $Wall \ mounted \ models \ may \ require \ a \ back-plate, \ please \ contact \ the \ sales \ office \ for \ further \ information.$ 







# CATEGORY 1 - GRUNDFOS CUE FREQUENCY CONVERTERS WITH RFI FILTER

# CUE 200-240/1/50Hz IP20/21 RFI FILTER CATEGORY C1



	Max output			
kW	current (A)	IP	Enclosure type	
1.1	6.6	IP20	A3	
1.5	7.5	IP21	B1	
2.2	10.6	IP21	B1	
3	12.5	IP21	B1	
3.7	16.7	IP21	B1	<u> </u>
5.5	24.2	IP21	B1	
7.5	30.8	IP21	B2	

£	Product Code	
1,753	99616601	
1,879	99616602	
2,081	99616613	
2,400	99616614	
2,791	99616615	
3,234	99616616	
4,030	99616617	

# CUE 200-240/1/50Hz IP55 RFI FILTER CATEGORY C1



	Max output			
kW	current(A)	IP	Enclosure type	
1.1	6.6	IP55	A5	
1.5	7.5	IP55	B1	
2.2	10.6	IP55	B1	
3	12.5	IP55	B1	
3.7	16.7	IP55	B1	
5.5	24.2	IP55	B1	
7.5	30.8	IP55	B2	

£	Product Code
1,941	99616618
2,234	99616619
2,601	99616620
2,913	99616621
3,290	99616622
3,876	99616623
4,649	99616624

dV/dT type

Product Code TBC TBC TBC TBC TBC TBC TBC TBC TBC 97669799 97669799 97669799 97669799 97669869 97669869 97669869 97669896 97669902 97669902 97669905 97669905 97669905 97669906 97669906

All single phase CUE inverters have a 3x200-240V output power supply to drive a 3ph motor.

# **OUTPUT FILTERS IP20 380-440V 3ph 50Hz**

	Sine	Sine Wave type	
kW	£	Product Code	£
0.55	571	96754941	-
0.75	571	96754941	-
1.1	656	96754972	-
1.5	656	96754972	-
2.2	756	96754973	-
3	756	96754973	-
4	887	96754974	-
5.5	971	96754976	-
7.5	971	96754976	-
11	1509	96754977	1,047
15	2109	96754978	1,047
18.5	2109	96754978	1,047
22	3690	96755019	1,047
30	4364	96755021	1,855
37	5037	96755032	1,855
45	6842	97774436	1,855
55	6842	97774436	3,230
75	9880	97775142	3,710
90	9880	97775142	3,710
110	11934	97775146	4,721
132	11934	97775146	4,721
160	16004	97775148	4,721
200	16004	97775148	5,564
250	19214	97775149	5,564

Note: All output filters are IP20 and require to be housed in a protective cabinet.

# **OUTPUT FILTERS IP20 200-240V 1ph 50Hz**

Sine	wave	type
------	------	------

kW	
1.1	
1.5	
2.2	
3	
3.7	
5.5	
7.5	

£	Product Code
756	96754973
756	96754973
971	96754976
971	96754976
971	96754976
1,509	96754977
2,109	96754978

Note: All output filters are IP20 and require to be housed in a protective cabinet.

Wall mounted models may require a back-plate, please contact the sales office for further information.

ACCESSORIES	£	<b>Product Code</b>
Floor mounting pedestal for D1 & D2	1.506	96801230
enclosures	2,300	30001230
Sensor input module MCB 114	332	96760901

### **CATEGORY 1 - VARIABLE SPEED PUMP ACCESSORIES**

### PRESSURE TRANSDUCER - SINGLE POINT PRESSURE TRANSMITTER FOR OPEN CIRCUIT APPLICATIONS (NO CABLE)



		Pressure		
Item	Fittings	range	£	Product Code
Danfoss MBS 3000	1/2" BSPM	0-2.5 bar	294	99033768
Danfoss MBS 3000	1/2" BSPM	0-4 bar	294	96637450
Danfoss MBS 3000	1/2" BSPM	0-6 bar	294	96637451
Danfoss MBS 3000	1/2" BSPM	0-10 bar	294	96637452
Danfoss MBS 3000	1/2" BSPM	0-16 bar	294	96637453
Danfoss MBS 3000	1/2" BSPM	0-25 bar	296	91072079
Danfoss MBS 3000	1/2" BSPM	0-40 bar	677	96483573
Danfoss MBS 3000	1/2" BSPM	0-60 bar	677	96483574

No cable included, except for 40 e 60bar models

Output signal: 4-20mA

### **DIFFERENTIAL PRESSURE TRANSDUCER KIT - FOR SEALED CIRCUIT APPLICATIONS**



Item	range	£	<b>Product Code</b>
DPI Transducer Kit	0-0.6 bar	889	96611522
DPI Transducer Kit	0-1 bar	889	96611523
DPI Transducer Kit	0-1.6 bar	889	96611524
DPI Transducer Kit	0-2.5 bar	889	96611525
DPI Transducer Kit	0-4 bar	889	96611526
DPI Transducer Kit	0-6 bar	889	96611527
DPI Transducer Kit	0-10 bar	889	96611550

DPI transducer kits need to be connected across the suction and discharge pipework.

Includes 0.9m screened cable, wall/motor bracket, capillary tubes and fittings.

Output signal: 4-20mA



		£	Product Code
DPS Transducer Kit	0-4 bar	POA	99725401
DPS Transducer Kit	0-6 bar	POA	99725451
DPS Transducer Kit	0-10 bar	POA	99725455

To be used with MGE permanent magnet motors (models H, I and J) only

Includes cable, motor bracket, capillary tubes and fittings.

### COMBINED RELATIVE PRESSURE AND TEMPERATURE SENSOR - for MAGNA3 and TPE3 heat monitor function



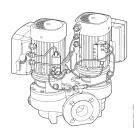
	Ndii	ge		
Item	Temperture	Pressure	£	Product Code
RPI T2	-10/120°C	0-16 bar	291	98355521

Output signal: 2x 0-10V Pipe connection: ½" BSPM

M12 plug

### **DIFFERENTIAL PRESSURE TRANSDUCER FITTINGS KIT**

Where customers wish to use two differential pressure transducers on a twin head TPED or TPE2 D pump, a fittings kit is required. These fitting kits will provide the necessary additional plumbing connections.



	£	Product Code
For all TPED models	129	96491010
For TPE2 D - DN32 and DN100 models	129	96491010
For TPE2 D - DN40, DN50, DN65 and DN80 models	132	99040405

The above comprises 2 Tees and 2 hexagon nipples.

**Note:** Pressure transducers are used for "feed back" information and to ensure automatic speed control on all TPE(D)/TPE2 (D)/TPE3 (D) models. TPE(D) 2000 and TPE3 (D) models have factory fitted differential pressure transducer.

For closed loop heating and chilled water systems, "differential pressure transducers" are more commonly used to attain the most accurate "feed back".

Where the pump developed pressure is equal to or greater than the "system pressure" then single point pressure transmitters can be successfully used.

The pressure at the pump suction should remain stable during all flow conditions in the system. Suggested transducer sizes are referenced against each TPE/TPED model. When selecting a Differential Pressure Transducer please use the suggested size. If selecting a Single Point Transducer, refer to the pump curve and then add the system operating pressure to the closed valve pressure on the pump curve for the appropriate size.

### NOTE - All list prices above are subject to Category 4 discount terms

### **CATEGORY 1 - COMMUNICATION**

### **GRUNDFOS GO REMOTE**

The Grundfos Go Remote is used for wireless infrared or radio communication with the pumps.



Model		£	<b>Product Code</b>
MI 301	Universal dongle for iOS and Android based Smartphones	461	98046408

# DATA COMMUNICATION INTERFACE - BUILT-IN CARDS - please refer to the table below



			Multi-E			
	MAGNA 3	MGE	PM	CU 352		
Model		motor "	motor 2)	CU 362	£	<b>Product Code</b>
CIM 050 GENIbus	х	Built-in	Built-in	Built-in	170	96824631
CIM 100 LON	х	Х	х		320	96824797
CIM 110 LON				x <sup>3)</sup>	320	96824798
CIM 150 Profibus DP	х	Х	х	Х	352	96824793
CIM 200 Modbus RTU/COMLI	х	Х	х	Х	320	96824796
CIM 260 Cellular EU 1)	х	Х	х	Х	697	99439302
CIM 280 GRM/GIC EU 1) 5)	х	Х	х	Х	697	99439724
CIM 300 BACnet MS/TP	х	Х	х	x <sup>3)</sup>	320	96893770
CIM 500 Ethernet 5)6)	Х	Х	х	Х	691	98301408
T	•		•		•	

<sup>1)</sup> Antenna not included

# **DATA COMMUNICATION INTERFACE for waste water AutoADAPT pumps**





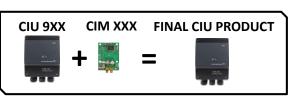
Model	£	Product Code
CIM 050 GENIbus	170	96824631
CIM 150 Profibus DP	352	96824793
CIM 500 Ethernet see note b)	691	98301408
CIM 260 Cellular EU 1)	697	99439302
CIM 280 GRM/GIC EU 1) 5)	697	99439724

### DATA COMMUNICATION INTERFACE - EXTERNAL BOXES - please refer to the table below



	£	Product Code
CIU 900 <sup>2)</sup>	290	99448387
CIU 901 With I/O board	422	99448389
CIU 902 Waste Water Auto Adapt	686	97644690
CIU 903 SQ Flex	686	98106399
1) Antenna not included		

## DATA COMMUNICATION INTERFACE - EXTERNAL BOXES - Selection example please refer to the table below



Model	CIU 900	CIU 901	CIU 902	CIU 903	
CIM 100 LON	х				
CIM 150 Profibus DP	Х		Х		
CIM 200 Modbus RTU/COMLI	Х	Х	Х		
CIM 300 BACnet MS/TP	Х		Х		
CIM 500 Modbus TCP / Profinet IC	Х	Х	Х	х	
CIM 260 Cellular Text	Х	Х	Х		
CIM 280 GRM /GiC	Х	х	х	Х	

# DATA COMMUNICATION INTERFACE - EXTERNAL BOXES - Selection Example for GSM or Grundfos Remote Management



Model	£	Product Code
2G/3G/4G Roof Antenna	152	99518079
Battery Pack 1)	51	99499908

<sup>1)</sup> CIM 260 and CIM280 can accommodate a rechargable battery to allow the CIM card to transmit in the event of power failure.

### NOTE - All the above list prices are subject to Category 4 discount terms

<sup>&</sup>lt;sup>2)</sup> One CIM card is required per master pump

<sup>&</sup>lt;sup>3</sup>/ Not available for CU362

 $<sup>^{\</sup>rm 47}$  Twin head TPED from 11kW (4 poles) and 15kW (2 poles) and above require a CIU.

For use with PHT A Grundfos pressurization units, please refer to page 5 of Cat 3B price list.

<sup>&</sup>lt;sup>3</sup> Grundfos Remote Management requires a license purchase for the provision of web services. Please contact Grundfos for further information

<sup>°)</sup> CIM500 supports Modbus TCP/ BACNET IP/ PROFINET/ ETHERNET IP/ GRUNDFOS REMOTE MANAGEMENT

 $<sup>^{2)}</sup>$  For use with Older Hydro Multi-E models / CUE / MP 204/ CU300/ Older MGE/ 11KW-22KW MGE

<sup>&</sup>lt;sup>2)</sup> SIM supply optional. Please contact Grundfos.

# **CATEGORY 1 - DOCUMENTATION AND TESTING**

# **DOCUMENTATION**

### TP(E)(D) PUMPS

All pumps will be supplied with one English (or multi-language) version of the appropriate Installation and operating instructions.

A separate Safety Instructions document which includes a CE Declaration of Conformity and electrical, safety and maintenance information is also included.

These documents will be included within the product packaging and further copies are available upon request.

Documents provided can also downloaded in pdf format from the Grundfos Product Center.

Any additional documentation requirements should be referred to your Sales Office contacts.

Please note there is a minimum handling fee of £10 net per POD.

# **CERTIFICATES & TESTING FOR TP/TPD, TPE/TPED PUMPS**

	£ NET	
SALES OFFICE GENERATED CERTIFICATES (NOT COVERED BY EN10204)	PER PUMP	<b>Product Code</b>
Letter of conformity	FOC	GBLOC001
Typical Test Certificate (Test Report - Non specific inspection and testing	70	GBTTC001
PRODUCTION GENERATED CERTIFICATES EN 10204 (must be requested at time of order)		
Letter of conformity	POA	96507895
Typical Test Certificate	POA	96507896
Standard test report according to ISO 9906:2012 grade 2B (5 point performance test)	POA	96507930
Inspection Certificate (EN 10204 3.1) - includes hydrostatic tests	POA	96507897
Inspection Certificate - Lloyds Register of Shipping LRS (EN 10204 3.2)	POA	96507898
Inspection Certificate - Det Norske Veritas DNV (EN 10204 3.2)	POA	96507899
Inspection Certificate - Germanischer Lloyd GL (EN 10204 3.2)	POA	96507920
Inspection Certificate - Bureau Veritas BV (EN 10204 3.2)	POA	96507921
Inspection Certificate - American Bureau of Shipping ABS (EN 10204 3.2)	POA	96507922
Inspection Certificate - Various other listed bodies	POA	On request
PRODUCTION GENERATED REPORTS ON GRUNDFOS VARIANTS (must be requested at time of order)		
ATEX Approved Pump Report	POA	96512240

# GENERAL NOTES

- 1 : All Production Test certificates and reports need to be agreed at order stage as these are incorporated into the pump product code cannot be produced retrospectively and must be arranged at time of order
- $2: All\ Production\ Test\ certificates\ except\ witness\ test\ certificates\ are\ included\ in\ the\ packaging$
- 3 : ALL PRICES ARE NET PER PUMP AND NOT SUBJECT TO ANY FURTHER DISCOUNT

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### CONDITIONS OF SALE AND SERVICE

Customer's attention is particularly drawn to the provisions of condition 13 (Warranty and Limitation of Liability)

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The definitions and rules of interpretation in this condition apply in these

Agreement: the contract between Grundfos and the Customer for the supply of Equipment and/or Services in accordance with the Order and these Condition Business Day: a day other than a Saturday. Sunday or bank or public holiday in England when banks in London are open for non-automated business. CDM Regulations: the Construction (Design and Management) Regulations 2015 Conditions: these terms and conditions as amended from time to time in

Customer: the person, firm or company who purchases Equipment and/or Services

Data Protection Legislation: all legislation and regulatory requirements in force from time to time relating to the use of personal data and the privacy of electronic communications, including, without limitation (i) any data protection legislation from time to time in force in the UK including the Data Protection Act 2018 or any successor legislation, as well as (ii) the General Data Protection Regulation ((EU) 2016/679) and any other directly applicable European Union regulation relating to data protection and privacy (for so long as and to the extent that the law of the European Union has legal effect in the UK).

**Delivery Location:** the location set out in the Order for delivery of the Equipment and/or Services or such other location as the parties may agree.

Equipment: all equipment, materials, goods and/or products, or any part or parts thereof, supplied by Grundfos to the Customer under this Agreement or used by Grundfos or its subcontractors in the supply of the Services.

**Equipment Specification:** any specification for the Equipment, including any relevant plans or drawings, that is agreed in writing by the Customer and Grundfos.

Event of Default: any occurrence of the events set out in condition 17.1 or 17.2. Force Majeure Event: acts, events, omissions or accidents beyond its reasonable control, including (without limitation) strikes, lock-outs or other industrial disputes (whether involving any supplier, contractor or agent of Grundfos or any other party beyond its reasonable control), failure of a utility service or transport network, act of God, war or threat of war, sabotage, riot, civil commotion, malicious damage, compliance with any law or governmental order, rule, regulation or direction, import or export embargoes, accident, breakdown of plant or machinery, fire, flood, storm or default of suppliers or subcontractors, difficulties in obtaining raw materials, labour, fuel, parts or machinery.

Grundfos: Grundfos Pumps Limited (Company No: 00805960) whose registered office is at Grovebury Road, Leighton Buzzard, Bedfordshire LU7 4TL

Health and Safety File: the health and safety file required by the CDM Regulations. **In-put Material:** all documents, information, tools and materials of the Custom required by Grundfos for the proper provision of the Services.

Intellectual Property Rights: patents, rights to inventions, copyright and related rights, trade marks, business names and domain names, rights in get-up, goodwill and the right to sue for passing off, rights in designs, database rights, rights to use, and protect the confidentiality of, confidential information (including know-how), and all other intellectual property rights, in each case whether registered or unregistered and including all applications and rights to apply for and be granted, renewals or extensions of, and rights to claim priority from, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

Maintenance Schedule: the maintenance schedule attached to the Order setting out the Services to be supplied by Grundfos to the Customer.
Order: the service support agreement or site visit request form in each case on

Grundfos' standard terms (whichever is applicable) including any schedules attached to the service support agreement or site visit request form.

Payment Schedule: the payment schedule attached to the Order setting out the charges applicable for the provision of the Services by Grundfos to the Customer Premium Service: the service package in accordance with Grundfos' terms as set out

Quotation: a written quotation issued by Grundfos.

Services: the services to be provided by Grundfos under this Agreement as set out in the Order or site visit request form together with any other services which Grundfos provides, or agrees to provide, to the Customer.

Site visit request form: Grundfos' Site Visit and Commissioning Request Form, or the equivalent internet log, which the Customer completes.

Time and Materials Rate: the rates set out in the Order.

Warranty: (Subject to condition 5.5) the warranty provided by Grundfos in respect of the Services as set out in condition 8.4 and Equipment as set out in condition 5.1 of these Conditions (as applicable).

Warranty Period: for product codes UPS2, UPS3, ALPHA1, ALPHA2, ALPHA3 and SCALA2 the warranty period shall be 5 years from the date of the manufacture and in all other cases the warranty period shall be 24 months from installation or 30 months from the date of manufacture (whichever expires soonest).

- Headings in these conditions shall not affect their interpretation
- 1.3 A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).
- The schedules and annexes form part of this Agreement 1.4 1.5
- A reference to writing or written includes fax and email and electronic chat
- Any obligation in this Agreement on a person not to do something includes, without limitation, an obligation not to agree, allow, permit or acquiesce in that thing being 1.6
- 1.7 References to schedules and annexes are to the schedules and annexes of the Order
- A reference to a statute or statutory provision is a reference to it as amended or re-1.8 enacted. A reference to a statutory provision includes all subordinate legislation make under that stature or statutory provision.

### Basis of Agreement

- 2.1 The Order constitutes an offer by the Customer to purchase Equipment and/or Services in accordance with these Conditions.
- 2.2 The Order shall only be deemed to be accepted on the earlier of: (a) an authorised representative of Grundfos issues written acceptance of the Order: or
  - (b) Grundfos delivers the Equipment and/or commences providing Services to the Customer in line with the Order, at which point and on which the date this Agreement shall come into existence.
- Any samples, drawings, descriptive matter or advertising issued by Grundfos and any 2.3 descriptions of the Equipment or illustrations or descriptions of the Services contained in Grundfos' catalogues or brochures are issued or published for the sole purpose of giving an approximate idea of the Services and/or Equipment described

No warranty or guarantee is given for their accuracy and they shall not form part of this Agreement or have any contractual force.

2 4 These Conditions shall:

(a) apply to and be incorporated into this Agreement;

(b) prevail over any other terms that the Customer seeks to impose or incorporate:

(c) prevail over any terms or conditions implied by law, trade custom, practice or course of dealing between Grundfos, the Customer or otherwise.

- These Conditions are subject to any terms, conditions and/or provisions set out in the Order. In the event of any conflict between the terms of these Conditions and the terms of the Order, the provisions of the Order shall prevail, but any special terms granted in respect of any one Order are not applicable to any subsequent Order without the express consent in writing by Grundfos. Quotations shall only be valid if issued in writing.
- 2.6
- 27 Any Quotations are given on the basis that no Agreement shall come into existence except in accordance with condition 2.2. Any Quotation is valid for a period of 30 days from its date (unless otherwise agreed by Grundfos), provided that Grundfos has not previously withdrawn it.
- 2.8 All of these Conditions shall apply to the supply of both Equipment and Services
- except where application to one or the other is specified.

  Any special terms agreed to by Grundfos for any Order shall not apply to any subsequent Order without the express agreement of an authorised representative of Grundfos.
- 2.10 The Customer is responsible for ensuring the accuracy of the terms of the Order and for providing to Grundfos in good time any necessary information required by Grundfos to enable Grundfos to perform its obligations under the Agreement.
- 2.11 Grundfos' minimum order value is £55.00. Orders between £55.00 and £335 for pumps or £130 for Category 4 items will be subject to a £37 handling fee.

### Equipment

- 3.1 The Equipment is described in Grundfos' catalogues as modified in any Equipment Specification.
- Unless confirmed in writing by Grundfos, Grundfos makes no representation as to the suitability of the Equipment for the Customer's particular purpose. The 3 2 Customer will be responsible for ensuring that the Equipment is suitable for its particular purpose and Grundfos shall have no liability to the Customer if the Equipment is not suitable for the Customer's particular purpose (so far as legally nossible).
- 3.3 Grundfos (and/or its subcontractors, suppliers or agents) reserves the right to: (a) change the design, construction or composition of the Equipment or the materials or equipment used in the Equipment as it shall think fit; and (b) amend the Equipment Specification of the Equipment if required by any applicable statutory requirements, and shall, in any case, notify the Customer of any such changes (if such changes are effected after this Agreement has come into existence but before the Equipment and/or Services have been fully performed). Samples of Equipment are available for inspection at Grundfos' offices. The samples
- are ex stock at the time of viewing and are without guarantee as to colour or dimensions at the time of delivery. The viewing of a sample does not create a sale by sample.

### **Delivery of Equipment**

- Grundfos shall deliver the Equipment to the Delivery Location. 4.1
- 4 2

Delivery of the Equipment shall be completed on:
(a) the completion of unloading of the Equipment at the Delivery Location or (in the absence of any specified Delivery Location by the Customer) upon Grundfos informing the Customer that the Equipment is ready; or

(b) (if the Customer or its agents and/or representatives elect to unload the Equipment themselves) upon Grundfos placing the Equipment at the disposal of the Customer, its agents or representatives at the agreed point.

- Grundfos' obligation under condition 4.1 is limited to delivering the Equipment only as near to the Delivery Location as a safe hard road permits. The Customer is to 4.3 provide to Grundfos, free of charge, reasonable assistance with unloading (unless the Customer elects to unload the Equipment itself).
- 4.4 Any dates quoted for delivery of the Equipment are approximate only, and the time and yourse you're to delivery of the Equipment are approximate only, and the third of delivery is not of the essence. Grundfos shall not be liable for any delay (or any additional costs arising out of the delay) in delivery of the Equipment that is caused by a Force Majeure Event or the Customer's failure to provide Grundfos with adequate delivery instructions or any other instructions that are relevant to the supply of the Equipment.
- The Equipment may be delivered in advance of the quoted delivery date upon giving reasonable notice to the Customer. 4.5
- 46 If the Customer fails to take delivery of the Equipment or fails to give Grundfos adequate delivery instructions at the time stated for delivery (otherwise than by reason of Grundfos' sole fault) then, without prejudice to any other right or remedy available to Grundfos:
  - (a) delivery of the Equipment shall be deemed to have been completed at 9.00am on the next Business Day following the day on which Grundfos notified the Customer that the Equipment was ready; and (b) Grundfos may:
  - (i) Charge a re-delivery fee if delivery is rearranged by Grundfos and the Customer; (ii) store the Equipment until actual delivery takes place, and charge the Customer for all related costs and expenses (including insurance) of such storage;
  - (iii) apply Grundfos' returns policy as set out in condition 6; or (iv) sell the Equipment at the best price readily obtainable and (after deducting all reasonable storage and selling expenses) charge the Customer for any
  - shortfall below the price payable by the Customer for the Equipment and Services (as applicable) under this Agreement.
- If the parties have agreed on express delivery, the dates quoted for such delivery 4.7 and agreed delivery dates are approximate only as delivery may vary due to factors not within Grundfos' reasonable control, e.g. leisurely or delayed customs clearance or other import or export obstacles. The parties agree that time of delivery is not of the essence and that Grundfos shall not be liable for any delay (or any additional costs arising out of the delay) in delivery caused by such events.
- Grundfos may deliver the Equipment by instalments.
- If Equipment is not received by the customer within 7 days of notification of dispatch by Grundfos or if it is received in a damaged condition or the quantity received differs from the quantity advised by Grundfos the Customer shall notify 4.9 Grundfos in writing. If such written notice is not received by Grundfos within 10 days of the date of Grundfos' dispatch notification, Grundfos will not be liable in respect of any loss or damaged suffered.
- 4.10 If a proof of delivery is required a £10 handling fee will apply.
- Proof of delivery shall only be retained by Grundfos for 3 months following delivery. 4.11 After 3 months it shall be assumed by both parties that delivery successfully took place unless there is evidence to the contrary.
- A £20 handling fee will apply per order to all orders for spares, pump components, spares kits and ancillary items such as flanges, unions etc. 4.12



#### **Quality of Equipment**

5.1 For the duration of the Warranty Period, Grundfos warrants that the Equipment

> (a) (subject to conditions 5.3 and 5.4) conform in all material respects with the Equipment Specification: and

(b) be free from defects in design, material and workmanship.

5.2 Subject to condition 5.3, if:

(a) the Customer gives notice in writing during the Warranty Period within 14 days of discovery that some or all of the Equipment does not comply with the Warranty set out in condition 5.1:

(b) Grundfos is given a reasonable opportunity to examine such Equipment; and (c) the Customer (if reasonably asked to do so by Grundfos) returns such Equipment to Grundfos (at Grundfos' cost), then Grundfos shall, at its option, repair or replace the defective Equipment, or refund the price of the defective Equipment in full. Repairs shall only be carried out between 8am and 5pm on Business Days agreed between Grundfos and Customer.

5.3 Grundfos shall not be liable for the Equipment's failure to comply with the Warranty

> (a) the Customer makes any further use of such Equipment after giving a notice in accordance with condition 5.2 unless otherwise approved by Grundfos (such approval not to be withheld unreasonably);

> (b) the defect arises because the Customer failed to follow Grundfos' or manufacturer's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Equipment or (if there are none) good trade practice;

(c) the defect arises as a result of Grundfos following any drawing, design supplied by the Customer or the Equipment Specification;

(d) the Customer alters, dismantles or repairs such Equipment without the written consent of Grundfos:

(e) the defect arises as a result of fair wear and tear, wilful damage, negligence, or abnormal working conditions: or

(f) the Equipment differs from its description as a result of changes made to ensure they comply with applicable statutory or regulatory standards.

Except as provided in this condition 5, Grundfos shall have no liability to the Customer in respect of the Equipment's failure to comply with the Warranty. 5.4

5.5 The terms of these Conditions shall apply to any repaired or replacement Equipment supplied by Grundfos under condition 5.2 but for the avoidance of doubt, the Warranty Period for any repaired or replaced Equipment shall be 12 months from the date of the repair. Return of Equipment

6 1 Equipment may not be returned to Grundfos except by the prior written permission of an authorised representative of Grundfos. Contact grundfosuk@sales.grundfos.com with the original purchase order number to arrange a return. Any such return shall be liable for any handling and restocking fees charged by Grundfos.

6.2 All Equipment requested to be returned to Grundfos will be subject to a minimum 35% restocking fee (subject to inspection). Equipment must be returned in its original packaging.

Equipment can only be returned within 6 months of the date of dispatch by 6.3 Grundfos. All returns will be subject to inspection to ascertain age, condition and

Equipment returned without prior authorisation will be refused delivery by Grundfos.

The following Equipment cannot be returned for credit in any circumstance: (a) items with a net value of less than £125 (per item):

(b) repair kits, power cable, engineered to order, third party sourced and obsolete

Any Equipment that has been in contact with hazardous liquids must be cleaned, 6.6 sealed in appropriate packaging, clearly labelled and accompanied by a COSHH certification by the Customer. Any carrier used must be licensed to carry to transport the relevant hazardous liquids.

### Title and Risk

7.3

7.1 The risk in the Equipment shall pass to the Customer on completion of delivery in accordance with condition 4.

Title to the Equipment shall not pass to the Customer until Grundfos receives payment in full (in cash or cleared funds) for the Equipment and any other 7 2 equipment or goods that Grundfos has supplied to the Customer in respect of which payment has become due in which case title to the Equipment shall pass at the time of payment of all such sums.

Until title to the Equipment has passed to the Customer, the Customer shall: (a) hold the Equipment (or any receipts received from the Customer where the Customer has sold the Equipment) on a fiduciary basis as Grundfos' bailee; (b) store the Equipment separately from all other goods held by the Custome (where possible) so that they remain readily identifiable as Grundfos' property: (c) not remove, deface or obscure any identifying mark or packaging on or relating to the Equipment (unless reasonably required for the functioning use of the

Equipment by the Customer); (d) maintain the Equipment in satisfactory condition and keep it insured against all risks for their full price on Grundfos' behalf from the date of delivery

(e) notify Grundfos immediately if the Customer becomes subject to any Event of Default;

(f) give Grundfos such reasonable information relating to the Equipment as Grundfos may require from time to time:

(g) give Grundfos at least 30 days' notice of its intention to move or relocate the Equipment to a new location. Grundfos may (at Grundfos' sole discretion) supervise the dismantling and removal of the Equipment, and inspect and reinstall the Equipment at the new location. Any supervision and work undertaken in respect of the relocation shall be charged at the

prevailing Time and Material Rates and is payable by the Customer in accordance with condition 11; and

(h) give Grundfos at least 14 days' notice of its intention to take any steps to appoint an administrator.

7.4 The Customer may incorporate the Equipment into or with any other goods provided that any new goods incorporating the Equipment shall become the sole and exclusive property of Grundfos and shall be separately stored and marked so as to be identifiable as being

manufactured by or containing Equipment belonging to Grundfos. Subject to condition 7.7, the Customer may resell the Equipment in the ordinary course of its business (but not otherwise) before Grundfos receives payment for the 75 Equipment. However, if the Customer resells the Equipment before that time: (a) It does so as principal and not as Grundfos' agent;

(b) Title to the Equipment shall pass from Grundfos to the Customer immediately

before the time at which resale by the Customer occurs.

If before title to the Equipment passes to the Customer the Customer becomes

7.6 subject to an Event of Default, then, without limiting any other right or remedy Grundfos may have, Grundfos may at any time:

(a) the Customer's right to resell the Equipment or use it in the ordinary course of its

(b) reasonably require the Customer to deliver up all Equipment in its possession:

(c) if the Customer fails to do so promptly, enter any premises of the Customer where the Equipment is stored in order to recover them; and (d) the Customer shall pay Grundfos' reasonable costs (including legal costs) for any

recovery of the Equipment pursuant to condition 7.7(c).

# **8.** 8.1

Grundfos shall provide the Services to the Customer in accordance with the Maintenance Schedule in all material respects and in accordance with the duration and timescales specified in the Order.

2 2 Grundfos shall use all reasonable endeavours to meet any performance dates for the Services specified in this Agreement, but any such dates shall be estimates only and time shall not be of the essence for the performance of the Services.

Grundfos shall have the right to make any changes to the Services which are necessary to comply with any applicable law or safety requirement, or which do not materially affect the nature or quality of the Services, and Grundfos shall notify the Customer in any such event. If Grundfos requests a change for any other reason, the 8.3 Customer shall not unreasonably withhold or delay consent to it.

8.4 Grundfos warrants to the Customer that the Services will be provided using reasonable care and skill.

Grundfos shall use reasonable endeavours to observe all health and safety rules and 8.5 regulations, and any other reasonable security requirements that apply at the Customer's premises and that have been communicated to it provided that it shall not be liable under this Agreement if, as a result of such observation, it is in breach of any of its obligations under this Agreement.

### Maintenance Service Times

9 1 Services will be carried out during the working times as specified in the Maintenance Schedule

Grundfos' standard daily fee rates for each individual person are calculated on the 9.2 basis of an eight-hour day between 8.00am and 5.00pm on Business Days. Grundfos shall be entitled to charge for any Services undertaken outside of these hours at the Time and Materials Rate in effect at the relevant time

Grundfos shall use reasonable endeavours to attend the Delivery Location, but if Grundfos is prevented by any reason outside his control or under the control of the 9.3 Customer, from installing the Equipment or carrying out the Services at the time of the visit, it shall not constitute a material breach of this Agreement. If additional visits are required to the Delivery Location which are not accounted for in the Maintenance Schedule, Grundfos reserves the right to charge the Customer at the Time and Materials Rate for all additional time incurred.

#### 10. Customer's obligations

10.1 The Customer shall:

(a) ensure that the terms of the Order and the Equipment Specification are complete and accurate;

(b) co-operate with Grundfos in all matters relating to this Agreement: (c) provide Grundfos, its employees, agents, consultants and subcontractors, with access to the Customer's premises, office accommodation and other facilities as reasonably required by Grundfos to provide the Services and/or deliver the Equipment;

(d) prepare the Customer's premises (or the location where the Services are to be performed) for the supply of the Services and/or the Equipment;

(e) provide adequate lighting, heating, power and ventilation as per Grundfos' reasonable requirements;

(f) inform Grundfos' engineer or representative on each visit about any unsatisfactory running or irregular performance of the Equipment or equipment in respect of which the Services are undertaken. (g) ensure the Equipment is installed and kept in suitable premises and under

suitable conditions, permit only trained and competent personnel to use it and follow any operating instructions as Grundfos may give from time to time; (h) provide a site visit request form to Grundfos in respect of any Services to be carried out by Grundfos, its agents, subcontractors, consultants or employees (as the case may be):

(i) provide to Grundfos, in a timely manner, such In-put Material and other information as Grundfos may require and ensure that it is accurate in all material

(i) be responsible (at its own cost) for preparing and maintaining the relevant premises for the supply of the Services and/or Equipment, including identifying, monitoring, removing and disposing of any hazardous materials from its premises in accordance with all applicable laws, before and during the supply of the Services

and/or Equipment at those premises; (k) inform Grundfos of all health and safety rules and regulations and any other reasonable security requirements that apply at the Customer's premises; (I) ensure that all In-Put Materials are in good working order and suitable for the

purposes for which it is used in relation to the Services:

(m) keep all Grundfos' materials, equipment, documents and other property (Grundfos Property) at the Customer's premises in safe custody at its own risk, keep all Grundfos Property in good condition until returned to Grundfos and not dispos of or use the Grundfos Property other than in accordance with Grundfos' written instructions and authorisations: and

(n) obtain and maintain all necessary licences and consents and comply with all relevant legislation in relation to the Services, the installation of the Equipment and the use of In-put Material in all cases before the date on which the Services are to start.

If Grundfos' performance of any of its obligations in respect of the Services is prevented or delayed by any act or omission by the Customer (including its agents, subcontractors, consultants or employees) or failure by the Customer to perform 10.2 any relevant obligation (Customer Default):

(a) Grundfos shall without limiting its other rights or remedies have the right to suspend performance of the Services until the Customer remedies the Customer Default, and to rely on the Customer Default to relieve it from the performance of any of its obligations under this Agreement to the extent the Customer Default prevents or delays Grundfos' performance of any of its obligations;

(b) Grundfos shall not be liable for any costs or losses sustained or incurred by the Customer arising directly or indirectly from Grundfos' failure or delay to perform any of its obligations as set out in this condition 10.2; and

(c) the Customer shall reimburse Grundfos on written demand for any costs or losses sustained or incurred by Grundfos arising directly or indirectly from the Customer Default.

10.3 The Customer shall be liable to pay to Grundfos, on demand, all reasonable costs, charges or losses sustained or incurred by Grundfos (including, without limitation, any direct, indirect or consequential losses, loss of profit and loss of reputation, loss or damage to property and those arising from injury to or death of any person and loss of opportunity to deploy resources elsewhere) arising directly or indirectly from the Customer's fraud,

negligence, failure to perform or delay in the performance of any of its obligations under this Agreement, subject to Grundfos confirming such costs, charges and losses to the Customer in writing.



10.4 The Customer shall not, without the prior written consent of Grundfos, at any time from the date of this Agreement to the expiry of 12 months after the last date of supply of the Services, solicit or entice away from Grundfos or employ (or attempt to employ) any person who is, or has been, engaged as an employee of Grundfos in the provision of the Services.

#### 11. The CDM Regulations

- The Customer and Grundfos agree that the Customer is to be treated for the purposes of the CDM Regulations as the Client for the purposes of the CDM . Regulations
- 11.2 The Customer agrees to ensure that the Works are carried out in accordance with
- the CDM Regulations.
  The Customer shall ensure that the Health and Safety File is maintained correctly 11.3 and is available for inspection in accordance with the CDM Regulations
- The Customer shall indemnify and keep the Owner indemnified against liability for any breach of the Customer's obligations under or in connection with this condition

### **Charges and Payment**

- 12 1 The price for the Equipment shall be the price set out in the Order or, if no price is quoted, the price set out in the published price list of Grundfos (or Grundfos as the case may be) as at the date of delivery. Unless otherwise stated in the Order, the price of the Equipment is exclusive of all costs and charges of packaging, insurance, transport of the Equipment, which shall be paid by the Customer when it pays for
- In the case of Product Services Service contracts, Installation Works and Engineered to Order products Grundfos reserves the right to request a deposit payment and/or payment milestones. The amount or means of calculating such payment shall be set out in the Quotation.
- Grundfos reserves the right to require (at its option) a parent company guarantee or a personal guarantee from the directors of the Customer at any time in relation to 12.3 all outstanding amounts due to Grundfos from the Customer from time to time.
- The charges for Services shall be set out in the Payment Schedule.
- 12.5 Unless stated otherwise all prices are given on a DAP (delivered at place) basis

Grundfos reserves the right to:

(a) increase its standard daily fee rates for the Services. Grundfos will give the Customer reasonable notice in writing of any such increase before the proposed date of the increase. If such increase is not acceptable to the Customer, it shall notify Grundfos in writing within 14 days of the date of Grundfos' notice and either of Grundfos or the Customer shall have the right, without limiting its other rights or remedies, to terminate

this Agreement by giving 14 days' written notice (or any other reasonable notice period if performance of the Order is due to commence within 14 days) to Grundfos or Customer (as applicable); and

(b) increase the price of the Equipment, by giving notice to the Customer at any time before delivery, to reflect any increase in the cost of the Equipment to Grundfos that

(i) any factor beyond the control of Grundfos (including foreign exchange fluctuations, increases in taxes and customs' charges and duties, and increases in labour, materials, fuel and other manufacturing costs);

(ii) any request by the Customer to change the delivery date(s), quantities or types of Equipment ordered, or the Equipment specification; or (iii) any delay caused by any instructions of the Customer in respect of the Equipment or failure of the Customer to give Grundfos adequate or

accurate information or instructions in respect of the Equipment. In respect of Equipment, Grundfos shall invoice the Customer on or at any time after completion of delivery. If delivery of the Equipment is made in instalments,

12.7 Grundfos may invoice the Customer in instalments. In respect of Services, Grundfos shall invoice the Customer in accordance with the Payment Schedule 12.8 The Customer shall pay each invoice submitted by Grundfos:

(a) within 30 days of the date of the invoice or in accordance with any other payment terms agreed by Grundfos in writing; and

(b) in full and in cleared funds to a bank account nominated in writing by Grundfos, and time for payment shall be of the essence of this Agreement.

All amounts payable by the Customer under this Agreement are exclusive of amounts in respect of value added tax chargeable from time to time (VAT). The 12.9 Customer shall pay any VAT which is chargeable on the supply of the Services and/or Equipment at the same time as payment is due for the supply of the Services and/or Equipment.

Grundfos may in its sole discretion elect to provide a credit facility to the Customer but is not obliged to do so. Any credit facility offered will be on written terms agreed 12.10 by Grundfos and the Customer.

Without prejudice to any other right or remedy that it may have, if the Custom fails to pay Grundfos on the due date, Grundfos may: 12.11

(a) charge interest on such sum from the due date for payment at an annual rate equal to the set rate of interest provided under the Late Payment of Commercial Debt (Interest) Act 1998 as varied from time to time accruing on a daily basis and being compounded quarterly until payment is made, whether before or after any judgment and the Customer shall pay the interest immediately on demand; (b) charge compensation for late payment at a set rate depending on the size of the debt in accordance with the Late Payment of Commercial Debt Regulations 2002 (SI 2002 No 1674). The minimum charge applicable is £40.00, the maximum applicable

(c) appropriate any payment by the Customer to any outstanding invoice as Grundfos may think fit not withstanding any purported appropriation by the

(d) suspend the provision of further Services until payment has been made in full. The Customer shall pay all amounts due under this Agreement in full without any 12.12 set-off, counterclaim, deduction or withholding except as required by law. Grundfos may, without limiting its other rights or remedies, set off any amount owing to it by the Customer against any amount payable by Grundfos to the Customer.

All sums payable to Grundfos under this Agreement shall become due immediately on its termination, despite any other provision. This condition 12.10 is without 12.13 prejudice to any right to claim for interest under the law, or any such right under

Grundfos shall have a lien on all of the Customer's property in Grundfos' possession 12.14 for all sums due at any time by the Customer to Grundfos subject to Grundfos giving not less than one month's written notice to the Customer. Grundfos shall be entitled to use, sell and dispose of any such property as agent for the Customer at the Customer's expense. The proceeds of such sale shall be applied towards the payment of monies due to Grundfos and Grundfos shall be discharged of any liability in relation to such property as a result of any sale.

Warranty and Limitation of Liability

THE CUSTOMER'S ATTENTION IS SPECIFICALLY DRAWN TO THIS CONDITION Nothing in these Conditions shall limit or exclude Grundfos' liability for: 13.1 (a) death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors;  $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1$ (b) fraud or fraudulent misrepresentation:

(c) breach of the terms implied by section 2 of the Supply of Goods and Services Act 1982 (title and quiet possession);

(d) breach of the terms implied by section 12 of the Sale of Goods Act 1979 (title and quiet possession); or

(e) defective products under the Consumer Protection Act 1987.

13.2 Subject to condition 13.1:

(a) Grundfos shall under no circumstances whatsoever be liable to the Customer. whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any loss of profit, turnover, data, business opportunity, anticipated savings, any indirect or consequential loss or any damage to goodwill arising under or in connection with this Agreement;

(b) Grundfos' total liability to the Customer where the Customer has provided Grundfos with incorrect weights, dimensions, capacity performance or other information shall in no circumstances exceed the price of the Equipment supplied in accordance with such incorrect information: and

(c) Grundfos' total liability to the Customer in respect of all other losses arising under or in connection with this Agreement, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, shall in no circumstances exceed

- The terms implied by sections 13 to 15 of the Sale of Goods Act 1979 and the terms implied by sections 3 to 5 of the Supply of Goods and Services Act 1982 are, to the fullest extent permitted by law, excluded from this Agreement. 133
- This condition 13 shall survive termination of this Agreement.

  The Customer shall indemnify Grundfos for any costs suffered by Grundfos for 13.5 claims from any third party which arise by virtue of the Customer having resold the Equipment (unless such claim arises solely from Grundfos' negligence).

# **14.** 14.1

Confidentiality and Grundfos' property
Each party (receiving party) shall keep in strict confidence all technical or commercial know-how, specifications, inventions, processes or initiatives which are of a confidential nature and have been disclosed to the receiving party by the other party (disclosing party), its employees, agents or subcontractors, and any other confidential information concerning the disclosing party's business, its products and services which the receiving party may obtain. The receiving party shall only disclose such confidential information to those of its employees, agents and subcontractors who need to know it for the purpose of discharging the receiving party's obligations under this Agreement, and shall ensure that such employees, agents and subcontractors comply with the obligations set out in this condition as though they were a party to this Agreement. The receiving party may also disclose such of the disclosing party's confidential information as is required to be disclosed by law, any governmental or regulatory authority or by a court of competent jurisdiction. Neither party shall use the other's confidential information for any purpose other

14.2 than to perform its obligations under this Agreement.

### Intellectual Property Rights

- 15.1 (Subject to condition 15.2) all Intellectual Property Rights in or arising out of or in connection with:
  - (a) the Equipment:
  - (b) the Services; or

(c) any manuals or documentation given by Grundfos to the Customer. shall be owned by Grundfos and nothing in this agreement shall transfer or assign any such Intellectual Property Rights to the Customer.

- The Customer acknowledges that, in respect of any third party Intellectual Property Rights, the Customer's use of any such Intellectual Property Rights is conditional on 15 2 Grundfos first obtaining a written licence from the relevant licensor on such terms as will entitle Grundfos to license such rights to the Customer.
- 15.3 The Customer grants to Grundfos a fully paid up, non-exclusive, royalty free, nontransferable licence to copy and modify any In-put Material for the purpose of providing the Services to the Customer.
- The Customer shall indemnify Grundfos against all liabilities, costs, expenses, damages and losses (including any direct, indirect or consequential losses, loss of 15.4 profit, loss of reputation and all interest, penalties and legal costs (on a full indemnity basis) and all other reasonable professional costs and expenses) suffered or incurred by Grundfos for actual or alleged infringement of a third party's Intellectual Property Rights arising out of or in connection with Grundfos' use of the Equipment Specification.

#### 16. Data protection

Both parties will comply with all applicable requirements of the Data Protection Legislation. This condition 16 is in addition to, and does not relieve, remove or 16.1 replace, a party's obligations under the Data Protection Legislation. In this condition 16 Applicable Laws means (for so long as and

to the extent that they apply to the Supplier) the law of the European Union, the law of any member state of the European Union and/or Domestic UK Law; and Domestic UK Law means any Data Protection Legislation from time to time in force in the UK

including the Data Protection Act 2018 or any successor legislation.
Without prejudice to the generality of condition 16.1 each party shall, in relation to 16.2 any Personal Data processed in connection with the performance by that party of its obligations under the Agreement:

(a) ensure that it has in place appropriate technical and organisational measures to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it):

(b) assist the other party, at the other party's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators; (c) notify the Customer without undue delay on becoming aware of a Personal Data

(d) at the written direction of the other party, delete or return Personal Data and

copies thereof to the other party on termination of the agreement unless required by Applicable Law to store the Personal Data; and (e) maintain complete and accurate records and information to demonstrate its compliance with this condition 16.

Neither party consents to the other appointing any third-party processor of Personal Data under the Contract. 163

### **17.** 17.1 Termination

Without limiting its other rights or remedies, Grundfos or Customer may terminate this Agreement with immediate effect by giving written notice to the other party if: (a) the other party commits a material breach of its obligations under this Agreement and (if such breach is remediable) fails to remedy that breach within 7 days after receipt of written notice to do so;



(b) the other party takes any step or action in connection with its entering administration, provisional liquidation or any composition or arrangement with its creditors (other than in relation to a solvent restructuring), being wound up (whether voluntarily or by order of the court, unless for the purpose of a solvent restructuring), having a receiver appointed to any of its assets or ceasing to carry on business [or, if the step or action is taken in another jurisdiction, in connection with any analogous procedure in the relevant jurisdiction;

(c) the other party suspends, or threatens to suspend, or ceases or threatens to cease to carry on all or a substantial part of its business; or (d) the other party's financial position deteriorates to such an extent that in the

terminating party's opinion the other party's capability to adequately fulfil its obligations under the Contract has been placed in jeopardy.

17 2 Without limiting its other rights or remedies, Grundfos may terminate this Agreement with immediate effect by giving written notice to the Customer if: (a) there is a change of control of the Customer (as defined in section 574 of the Capital Allowances Act 2001);
(b) the Customer is unable or unwilling to procure any guarantee required by

Grundfos in accordance with condition 12 3: or (c) the Customer's financial position deteriorates to such an extent that in Grundfos'

opinion the Customer's capability to adequately fulfil its obligations under the Contract has been placed in jeopardy or Customer fails to pay any amount due under this Agreement on the due date for payment.

17.3 Without limiting its other rights or remedies, Grundfos may suspend the supply of Services or all further deliveries of Equipment under this Agreement or any other agreement between the Customer and Grundfos if the Customer becomes subject to an Event of Default, or Grundfos reasonably believes that the Customer is about to become subject to any of them.

17.4

On termination of this Agreement for any reason:
(a) the Customer shall immediately pay to Grundfos all of Grundfos' outstanding unpaid invoices and interest and, in respect of Services supplied but for which no invoice has yet been submitted, Grundfos shall submit an invoice, which shall be payable by the Customer immediately on receipt;

(b) the Customer shall return all of Grundfos' materials and any deliverables which have not been fully paid for and which have not been installed as part of a bigger system. If the Customer fails to do so, then Grundfos may enter the Customer's premises and take possession of them. Until they have been returned, the Customer's premises and take possession of them. shall be solely responsible for their safe keeping and will not use them for any purpose not connected with this Agreement; (c) the accrued rights and remedies of the parties as at termination shall not be

affected, including the right to claim damages in respect of any breach of this Agreement which existed at or before the date of termination or expiry; (d) conditions which expressly or by implication have effect after termination shall continue in full force and effect; and

(e) Grundfos shall have a lien over all of the Customer's property in Grundfos possession in respect of all sums due at any time from the Customer to Grundfos. Provided that Grundfos gives at least 14 days' prior written notice, Grundfos shall be entitled to use, sell and dispose of such property as agent for and at the expense of the Customer and apply the proceeds towards the payment of monies due and outstanding from the Customer to Grundfos. Thereafter, Grundfos shall be

discharged of any liability in respect of the Customer's property.

On termination of this Agreement (however arising), any of these Conditions that expressly or by implication is intended to have effect after termination (or expiry) shall survive and continue in full force and effect.

18. Force maieure

Grundfos shall have no liability to the Customer under this Agreement if it is prevented from, or delayed in performing, its obligations under this Agreement or from carrying on its business by any Force Majeure Event.

19.

Except as provided in these Conditions, no variation of this Agreement or these Conditions or of any of the documents referred to in them shall be valid unless it is in writing and signed by or on behalf of each of the authorised representatives of

20. Waiver

A waiver of any right under this Agreement is only effective if it is in writing and it applies only to the circumstances for which it is given. No failure or delay by a party 20.1 in exercising any right or remedy under this Agreement or by law shall constitute a waiver of that (or any other) right or remedy, nor preclude or restrict its further exercise. No single or partial exercise of such right or remedy shall preclude or restrict the further exercise of that (or any other) right or remedy.

Unless specifically provided otherwise, rights arising under this Agreement are

20.2 cumulative and do not exclude rights provided by law.

**21.** 21.1

If any provision of this Agreement (or part of any provision) is found by any court or other authority of competent jurisdiction to be invalid, illegal or unenforceable, that provision or part-provision shall, to the extent required, be deemed not to form part of this Agreement, and the validity and enforceability of the other provisions of this Agreement shall not be affected. 21.2

If a provision of this Agreement (or part of any provision) is found illegal, invalid or unenforceable, the provision shall apply with the minimum modification necessary to make it legal, valid and enforceable

22.1 This Agreement constitutes the whole agreement between the parties and supersedes all previous agreements between the parties relating to its subject

Each party acknowledges that, in entering into this Agreement, it has not relied on, and shall have no right or remedy in respect of, any statement, representation, assurance or warranty (whether made negligently or innocently) (other than for 22.2

breach of contract), as expressly provided in this Agreement.

Nothing in this condition shall limit or exclude any liability for fraud. 22.3

23. Assignment 23.1

The Customer shall not, without the prior written consent of Grundfos, assign, transfer, charge, mortgage, subcontract or deal in any other manner with all or any of its rights or obligations under this Agreement.

Grundfos may at any time assign, transfer, charge, mortgage, subcontract or deal in

23.2 any other manner with all or any of its rights under this Agreement and may subcontract or delegate in any manner any or all of its obligations under this Agreement to any third party or agent.

Each party that has rights under this Agreement is acting on its own behalf and not 23.3 for the benefit of another person.

24.

No partnership or agency
Nothing in this Agreement is intended to, or shall be deemed to, constitute a partnership or joint venture of any kind between any of the parties, nor constitute any party the agent of another party for any purpose. No party shall have authority to act as agent for, or to bind, the other party in any way

25. Rights of third parties

A person who is not a party to this Agreement shall not have any rights under or in connection with it.

#### Notices 26.

- 26.1 Any notice required to be given under this Agreement shall be in writing and shall be delivered personally, or sent by pre-paid first-class post, recorded delivery or by commercial courier to the registered office or the address stated in the Order (or as otherwise notified to the other party in writing).
- Any notice shall be deemed to have been duly received if delivered personally, when left at the correct address or, if sent by pre-paid first-class post or recorded delivery, at 9.00am on the second Business Day after posting, or if delivered by commercial 26.2 courier, on the date and at the time that the courier's delivery receipt is signed.
- This condition 26 shall not apply to the service of any proceedings or other 26.3 documents in any legal action.
- 26.4 A notice required to be given under this Agreement shall also be validly served if sent by e-mail

### Governing law and jurisdiction

- This Agreement, and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims), shall be governed by, and construed in accordance with, the law of England and Wales. 27.1
- 27.2 The parties irrevocably agree that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim that arises out of, or in connection with, this Agreement or its subject matter or formation (including non-



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