



CASTLE PUMPS LTD

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The UK Agent of...
azcuepumps



Datasheet

Compact design ideal for installations where space saving is an issue

Pump **manufactured in Spain** with materials from own foundry

Additional bearing in the pump head to share the strain of operation and increase robustness

Pump is **reversible** on request

Interchangeable spare parts with other Azcue models to reduce stock holding

Bearings greased for life with bearing replacement at 35,000 intervals

Marine type approved by all classification societies e.g. Lloyds/ABS

Magnetic coupling on request to prevent the leaking of a mechanical seal - enhances service life when used for critical applications

Spacer coupling between pump & motor to enable maintenance without having to remove the pump or motor from the pipework first

Available **with brackets** to make pump vertical

Competitively priced in the market compared to other small screw pumps available

Able to handle **lubricating fluids** under fluctuating flow, pressure and viscosities without losing efficiency

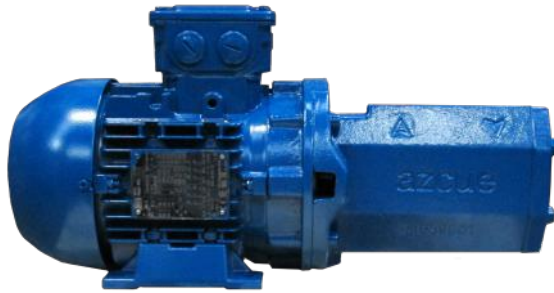
Built in **relief valve** for pump protection



Series **BT-HM**

Triple Screw Pump – Spacer Coupled

BT-HM Triple Screw Pump – Spacer Coupled



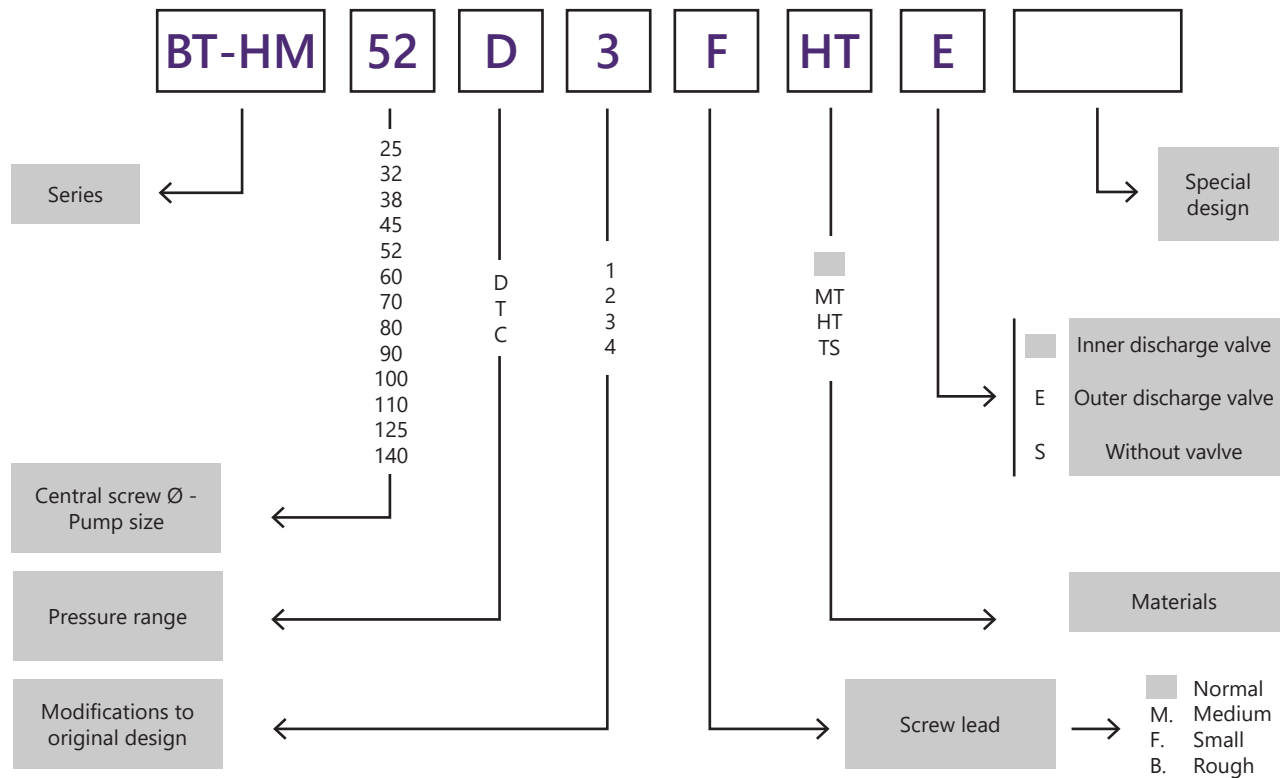
Performance:

Max Flow rate	10 m ³ /h
Max Pressure	16 bar
Sizes Available	DN1" - DN1.5" Outlet


Maximum Fluid Temperature:

Normal	100°C
MT	130°C
HT-TS	155°C

Description



Available Options -

- ATEX approved 
- Magnetic coupling - To prevent the leaking that can occur with worn mechanical seals. Enhances service life when used for critical applications
- Reversible operation

Common Applications -

- Diesel
- Kerosene
- Petroleum
- Fuel oil
- Marine fuel transfer (MGO, HFO)
- Fuel oil cargo loading/unloading
- Lube oil transfer
- Lubricant circulation
- Fuel oil separatin

Benefits -

- Manufactured in Spain by manufacturer with over 100 years' experience, using materials from their own foundry for complete control
- Marine type approved by all classification societies e.g. Lloyds/ABS for independent verification the pump meets quality standards
- Fitted with a lantern bracket to separate the pump head from the motor, so should the seal fail fluid is prevented from entering the motor and causing damage to this part
- Compact and space saving design with smaller footprint compares to equivalent performing gear pump, making it ideal for installations which have limited space
- Separate shafts in pump head and motor, which means that there is no need to replace entire pump and motor if shaft wears, saving costs
- Able to handle lubricating fluids under fluctuating flow, pressure and viscosities without lose efficiency
- Interchangeable spare parts with other Azcue models to reduce stock holding required
- Spares available for a minimum of 15 years after model discontinuation for long term servicing even if the pump is no longer produced
- Bearings are greased for life with long service intervals to reduce maintenance costs – bearings replaced at 30,000 hours
- Integrated manually adjustable pressure relief valve for pump protection
- Motors are tropicalized as standard for operation up to 45°C meaning the motor is designed continue operating during higher than average temperature
- Can be reversible upon request for tank to tank transfer and for emptying the discharge line
- Magnetic coupling on request to prevent the leaking that can occur with worn mechanical seals and enhance service life when used for critical applications.
- ATEX approved version for hazardous environments and flammable fluids

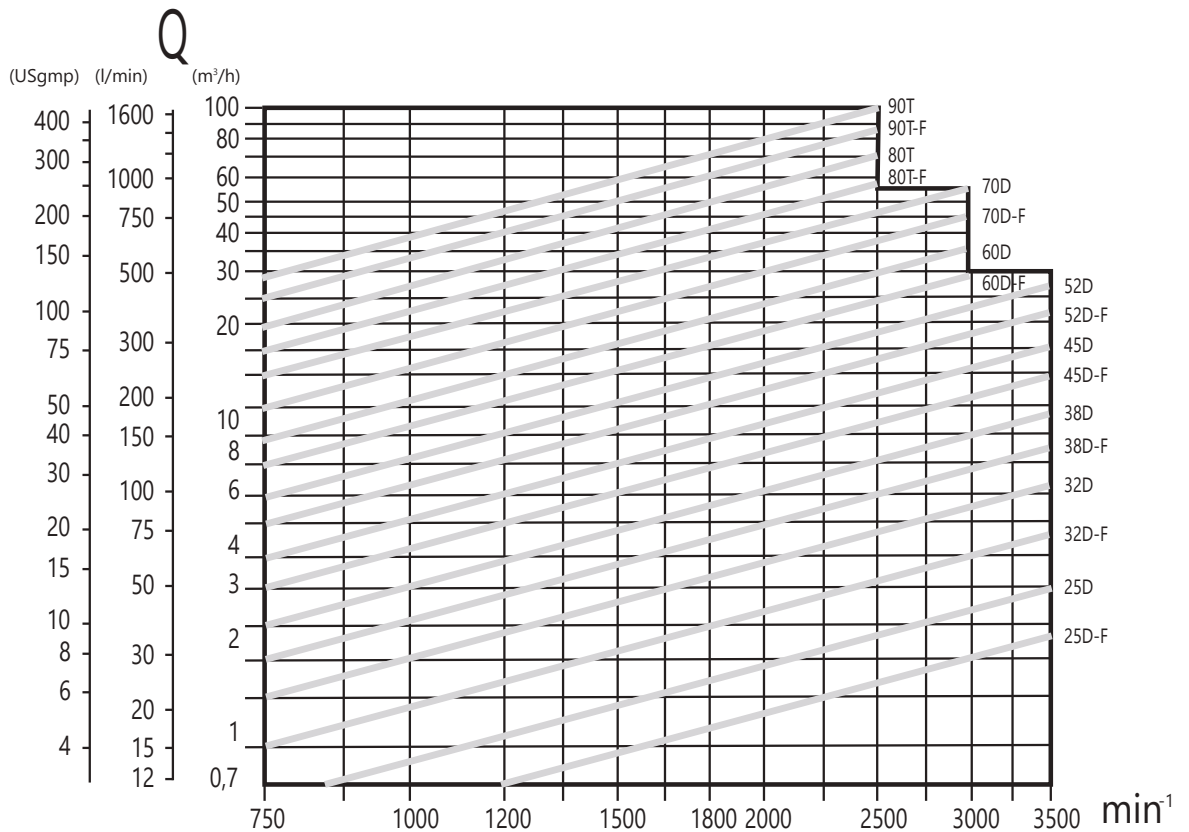
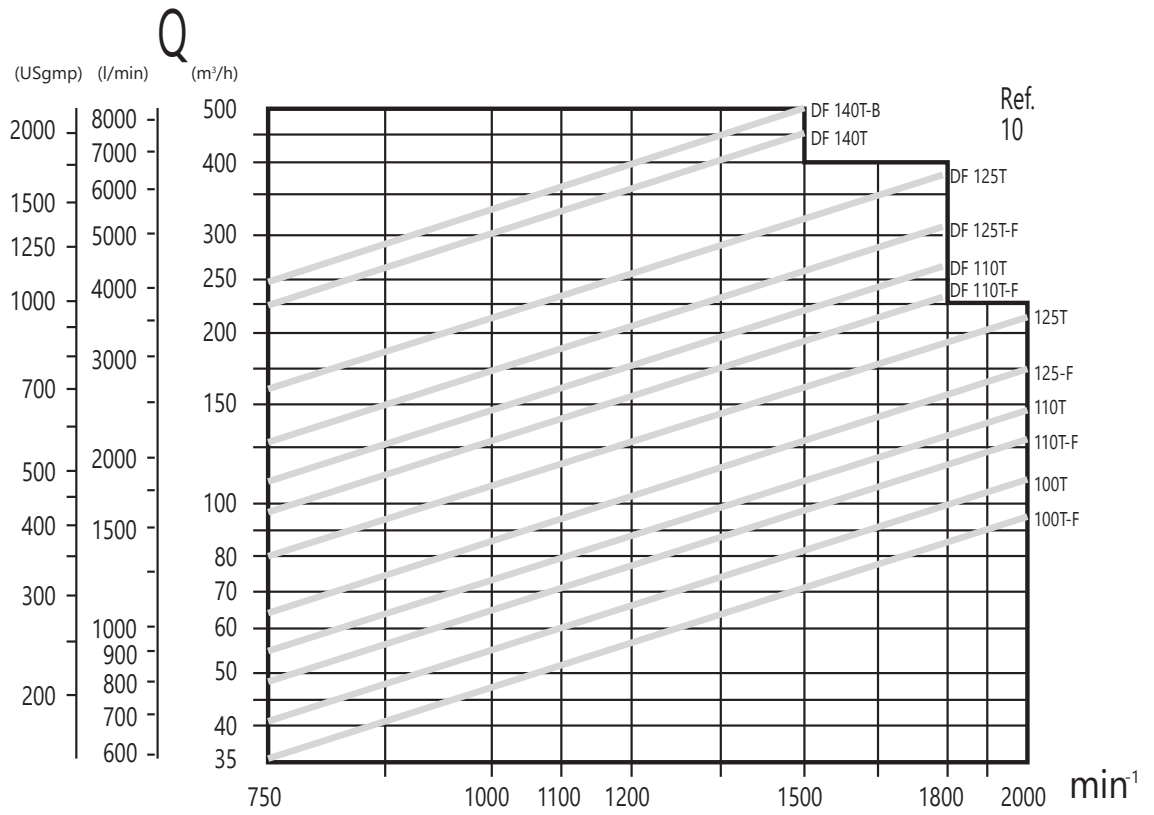


Materials

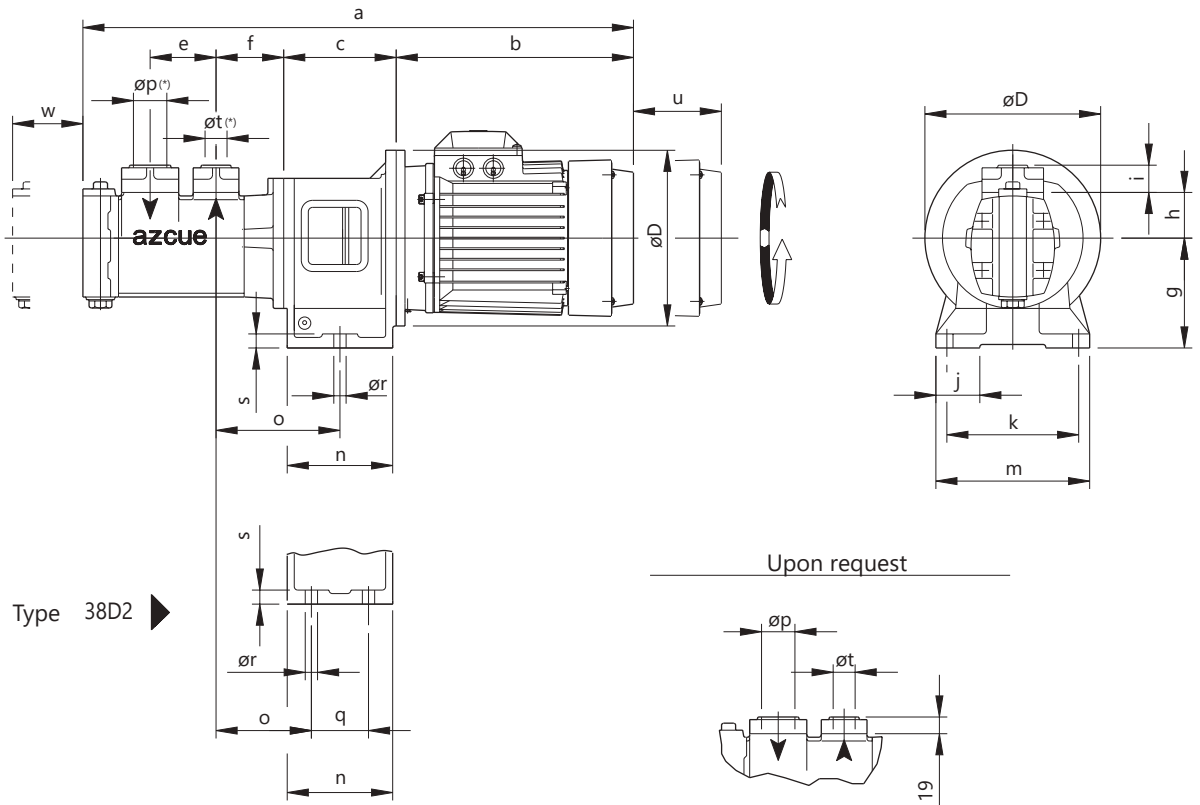
	Standard	MT	HT	TS
Pump casing	GG25	GGG40	GGG40	
Driving spindle	Nitrided Steel	Nitrided Steel	Nitrided Steel	
Idler spindles	GG30 Nitrided	GG30 Nitrided	GG30 Nitrided	
Mechanical seal	Graphite Hardened Steel Viton	Graphite Hardened Steel Viton	Carb. silic. Carb. silic. Viton	Carb. silic. Carb. silic. Viton



Performance Curves



Dimensions



(*) Threaded counterflanges (standard)

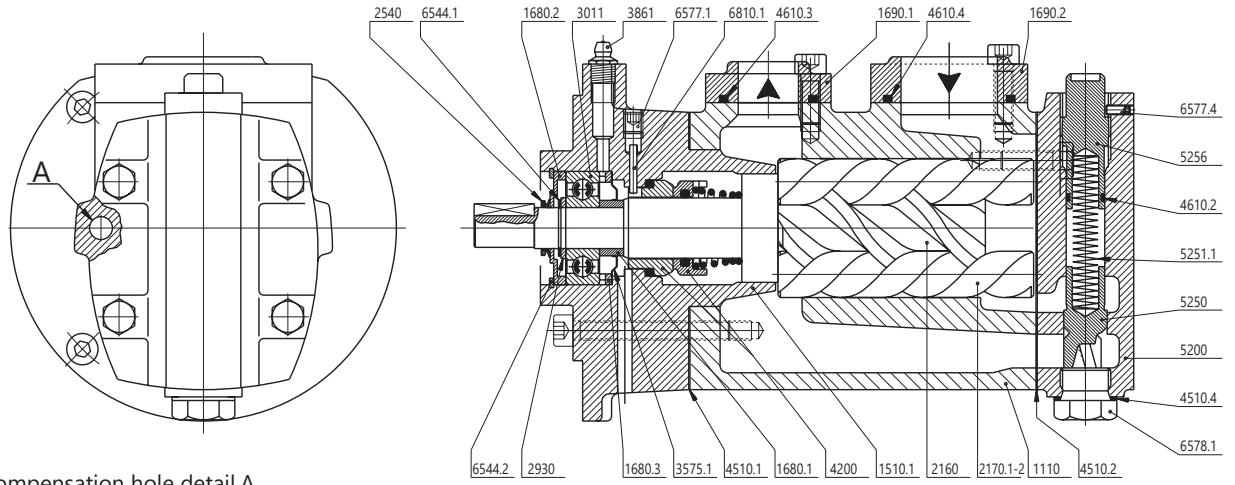
Counterflanges for pipe welding

Pump	Type	Motor			a	b	c	D	e	f	g	h	i	j	k	m	n	q	o	r	s	p	t	u	w	kg (1)	
		R.p.m. / t/min.																									
			950	1.450	2.900																						
HM 25D2	71-b	KW	0,25	0,37	0,55	550	210	128	160	60	74	125	52	31	50	150	175	120	-	138	14	16	25	25	100	80	30
	80-a		0,37	0,55	0,75	580	235																				33
	80-b		0,55	0,75	1,1	580	235																				33
	90-S		0,75	1,1	1,5	615	270																				39
	90-L		1,1	1,5	2,2	615	270																				41
HM 32D2	80-b	Power	0,55	0,75	1,1	600	235	128	160	75	77	125	52	31	50	150	175	120	-	141	14	16	40	25	100	80	34
	90-S		0,75	1,1	1,5	635	270	38																			
	90-L		1,1	1,5	2,2	635	270	40																			
	100-L		1,5	2,2-3	3	695	310	45																			
	112-M		2,2	4	4	695	310	57																			
HM 38D2	90-S	Power	0,75	1,1	1,5	665	270	128	200	85	85	160	62	31	50	200	225	120	65	115	14	16	40	40	100	80	44
	90-L		1,1	1,5	2,2	665	270	46																			
	100-L		1,5	2,2-3	3	725	310	51																			
	112-M		2,2	4	4	725	310	63																			
	132-S		3	5,5	5,5-7,5	830	385	75																			

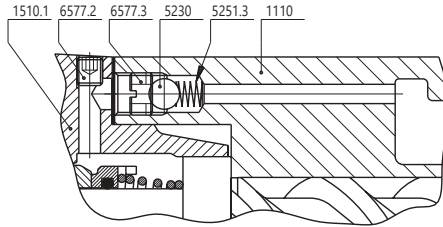
Subject to alterations

(1) Total weight including motor

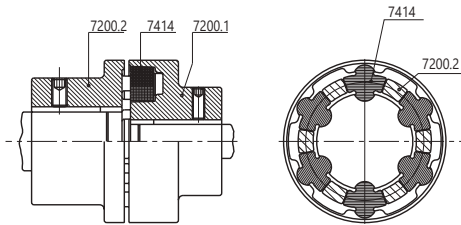
Sectional Drawing



Compensation hole detail A



Coupling



Sectional Drawing

Description	Ref.
Pump casing	1110
Pump casing insert	1130
Cover	1480.1
Cover	1480.2
Pump cover	1510.1
Pump cover	1510.2
Pump cover	1510.3
Spacer bush	1680.1
Spacer bush	1680.2
Spacer bush	1680.3
Flange	1690.1
Flange	1690.2
Pump foot	1720
Driving spindle	2160
Idler spindle	2170.1-2
Solidary shaft	2161
Bush	2187.1
Bush	2187.2
Thrower	2540
Loose collar shoulder ring	2930
Radial ball bearing	3011
Grease retaining cover	3575.1
Grease retaining cover	3575.2
Bearing bush	3610.1-2
Bearing nut	3850
Bearing nut	3850.1
Bearing nut	3850.2
Grease nipple	3861
Mechanical seal	4200
Mechanical seal cover	4213
Joint	4510.1
Joint	4510.2
Joint	4510.3
Joint	4510.4
Joint	4510.5
Joint	4510.6
O-ring	4610.1
O-ring	4610.2
O-ring	4610.3
O-ring	4610.4
O-ring	4610.5
O-ring	4610.6
O-ring	4610.7
O-ring	4610.8
Ball valve	5120
Compensating valve	5150
Valve body	5200
Valve ball	5230
Valve seat	5240.1
Valve seat	5240.2
Valve piston	5250
Valve spring	5251.1
Valve spring	5251.2
Valve spring	5251.3
Valve spring plate	5252
Regulating spindle	5256
Valve spacer sleeve	5257
Lockwasher	6540.1
Lockwasher	6540.2
Circlip	6544.1
Circlip	6544.2
Circlip	6544.3
Grub screw	6577.1
Grub screw	6577.2
Grub screw	6577.3
Grub screw	6577.4
Grub screw	6577.5
Screwed plug	6578.1
Screwed plug	6578.2
Guide pin	6584
Pin	6810.1
Pin	6810.2
Pin	6810.3
Filter	6900
Coupling half	7200.1
Coupling half	7200.2
Coupling bush	7414