



CASTLE PUMPS LTD

Your process delivered.

The UK Agent of...
azcuepumps



Datasheet

High flow capabilities for the transfer of large volumes

Interchangeable spare parts with other Azcue models to reduce stock holding

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

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

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

Long coupled to enable maintenance of pump head without removing the motor first



Space saving vertical design - smaller footprint than equivalent performing gear pumps

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

Built in **relief valve** for pump protection

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

Manufactured in Spain with materials from own foundry

Pump is **reversible** on request

Series **BT-DF/DG** Triple Screw Pump – Heavy Duty, Long Coupled

BT-DF/DG Triple Screw Pump – Heavy Duty, Long Coupled



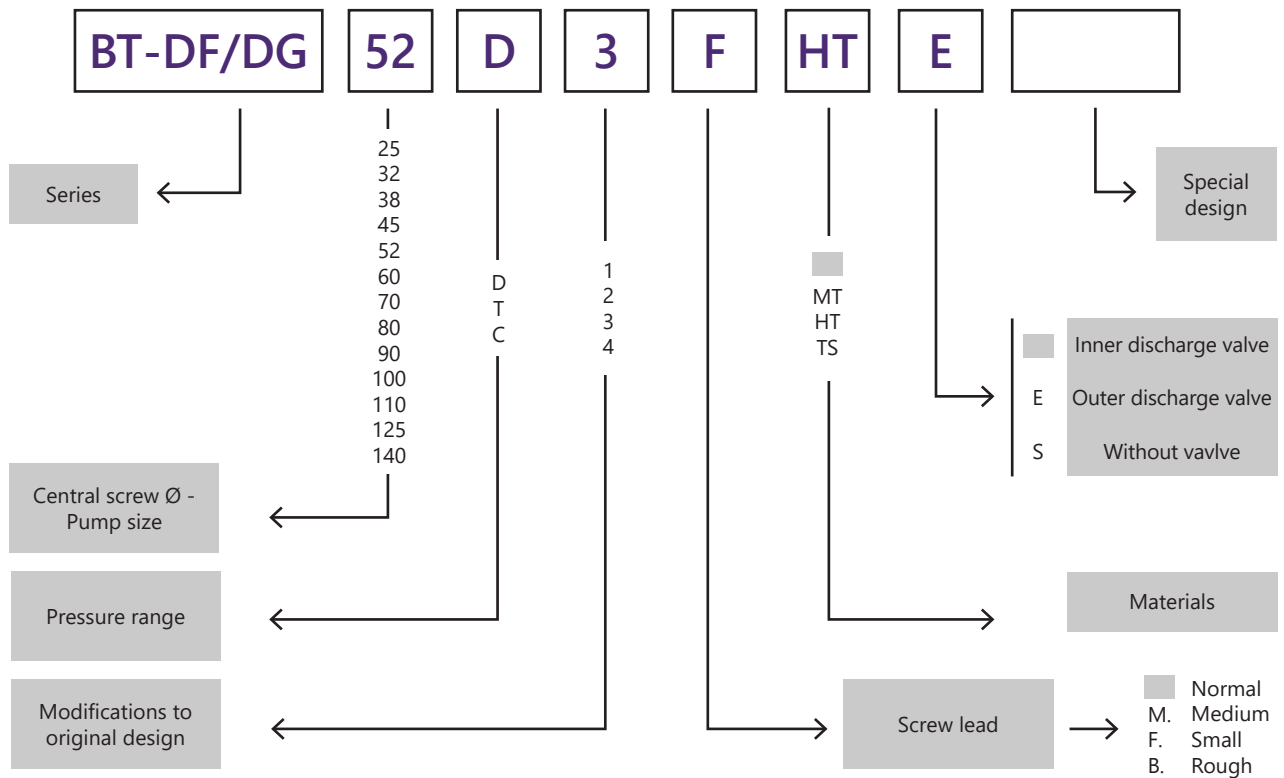
Performance:

Max Flow rate	450 m ³ /h
Max Pressure	12 bar
Sizes Available	DN200 - DN250 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 separation

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
- High flow capabilities for the handling of large volumes of fluids and bulk transfer applications
- Long coupled 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
- Easy to maintain thanks to being able to access the pump head without removing the motor first
- 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 30-35,000 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

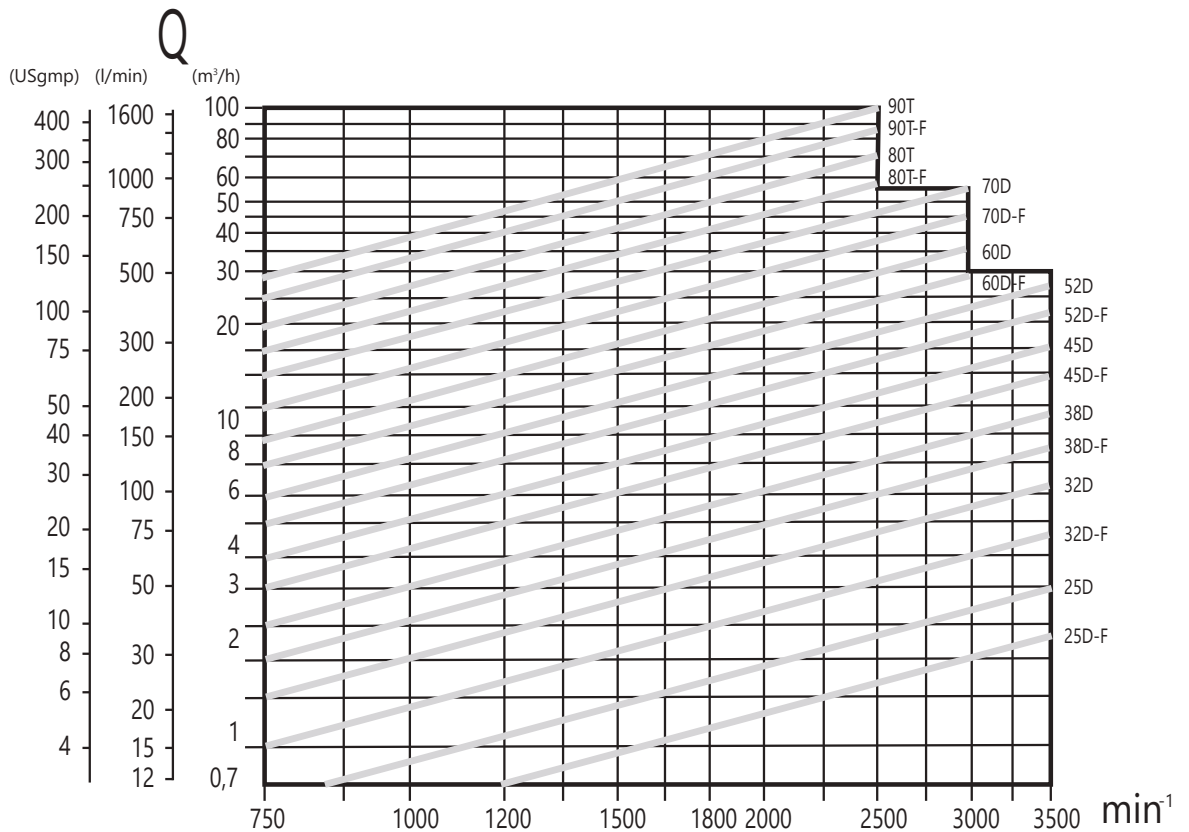
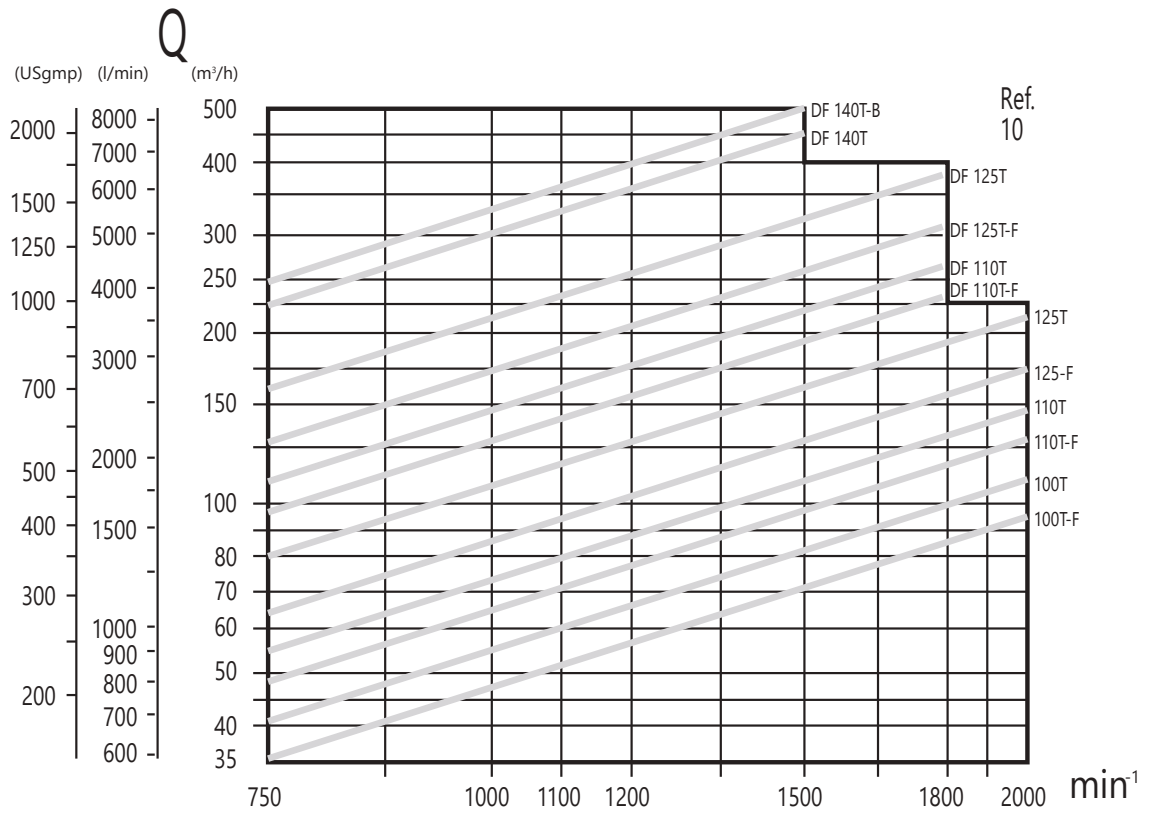


Materials

	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

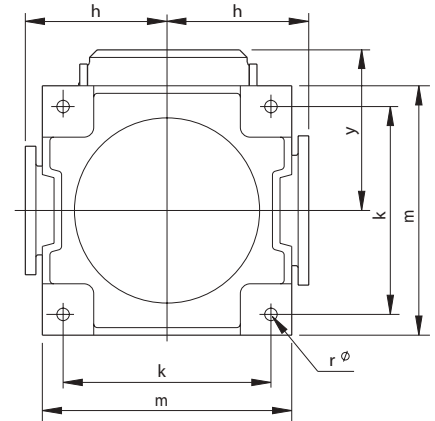


Performance Curves



Dimensions

Pump	Type	Motor			a	b	c	D	e	f	h	k	m	r	s	y	DNa	DNd	u	kg (*)	
		R.p.m. / t/min.																			
		725	950	1.450																	
DF 110T 125T	160-L	7,5	11	15	1758	530															
	180-M	-	-	18,5	1808	580	380	350												170	
	180-L	11	15	22																	
	200-L	15	18,5-22	30	1858	630		400													
	225-S	18,5	-	37	1958	700														830	
	225-M	22	30	45				450	448	848	375	550	660	33	50	425	250	200			
	250-M	30	37	55	2033	775	410													200	
	280-S	37	45	75	2158	900		550													
	280-SMA	45	55	90	2258	1000															
	315-SA	55	75	110	2288	1000															
315-SMA	75	90	132	2388	1100	440	660												230	845	
DF 140T	225-S	18,5	-	37	2145	700		450													
	225-M	22	30	45																	
	250-M	30	37	55	2220	775	410		530	1035	425	550	660	33	50	500	300	250		200	1050
	280-S	37	45	75	2345	900		550													
	280-SMA	45	55	90	2445	1000															
	315-SA	55	75	110	2475	1000															
	315-SMA	75	90	132	2575	1100	440	660													
	315-MB	90	110	160																	
	315-LA	110	132	200	2625	1150															



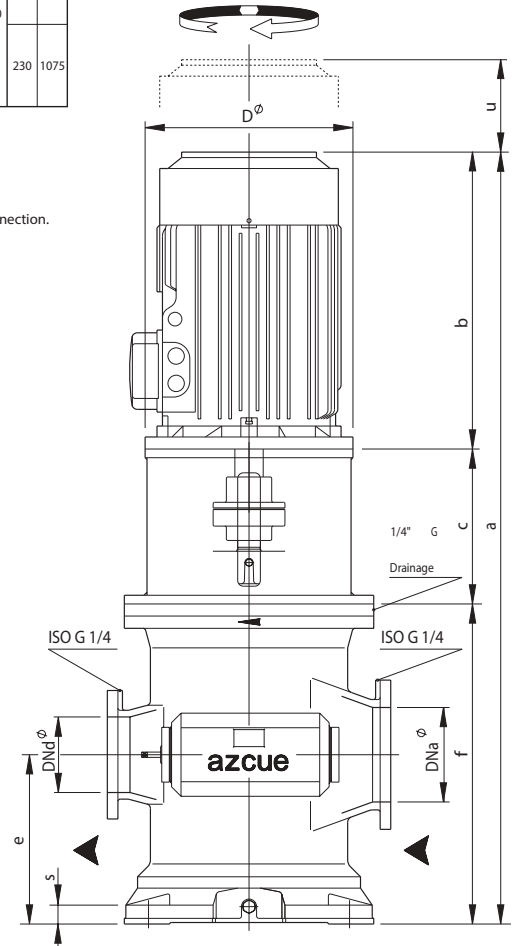
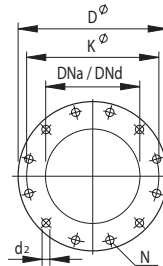
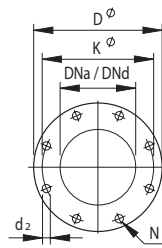
Serie BT-DG Series "c" y "a" +90 mm

Subject to alterations

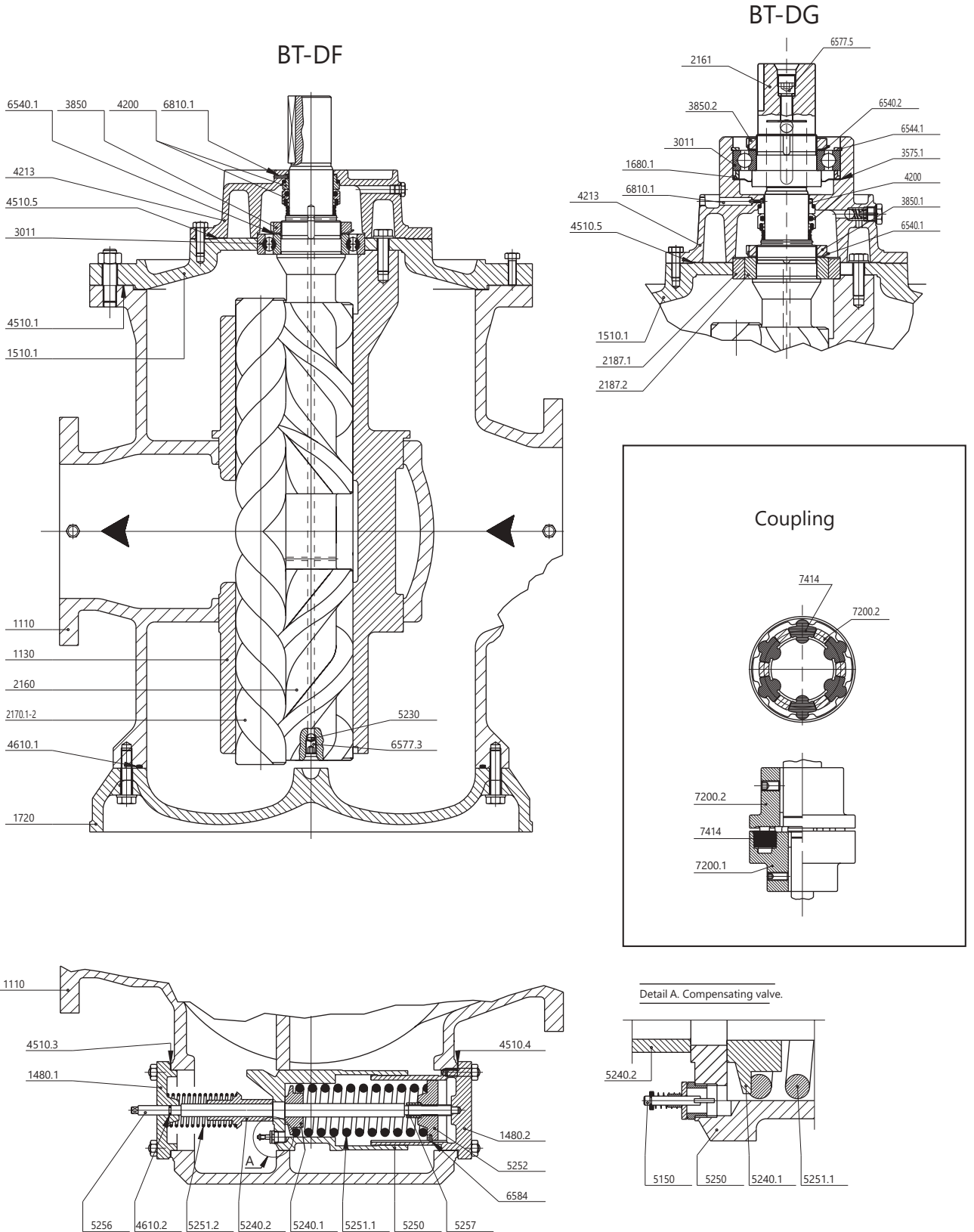
* The stated weight does not include the motor (1) Vacuumeter connection. (2) Manometer connection.

DIN 2501. Pn 10

DNa / DNd	200	250	300
K ^φ	295	350	400
D ^φ	340	395	445
N ^o	8	12	12
d ₂	22	22	22



Sectional Drawing



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