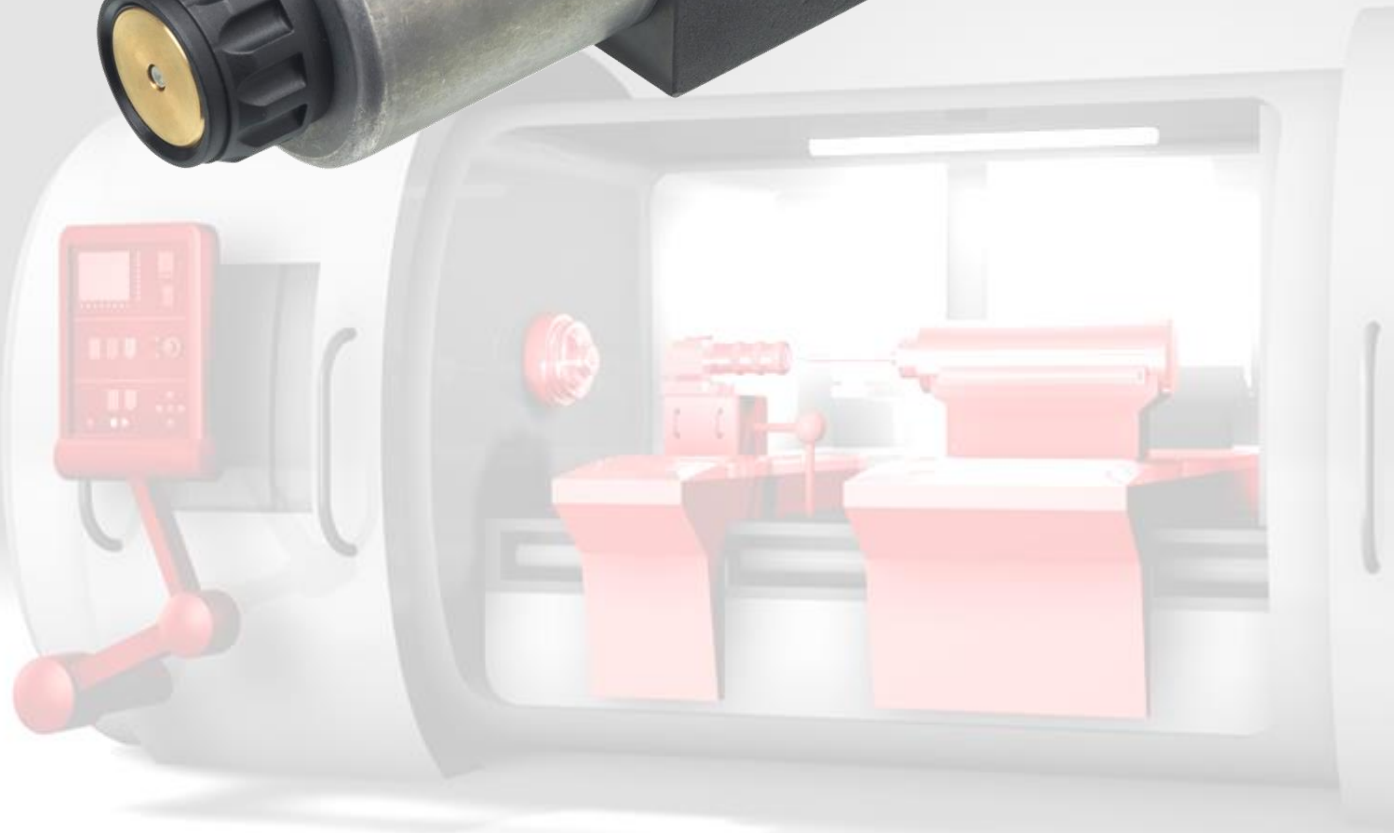


## *Valve News*

## **New Series - NG10 directional valves**



## SPECIFICATIONS

- pmax. = 350 bar
- Qmax. = 160 l/min
- direct operated

## KEY FIGURES

start of production: 01.05.2018

## BACKGROUND

Hydac has decades of experience in system engineering. There is always the aim to use as many Hydac products as possible in these systems. Therefore, the range of used industrial valves increased continuously. At the same time, demand of industrial valves from external customers increased.

In order to be able to meet the needs of customers even better and to realize customer-specific requirements, a new production line has now been launched.

Within the scope of this development, the valve series NG10 was designed after our valve series NG6, which is characterized by a higher maximum pressure, a higher maximum volume flow and greater flexibility in the realization of application-specific piston symbols.

## MODIFICATIONS

As part of the modification, the series and the material number will change (the overview for all valves is attached).

4WE 10 J **S01**-24DG/V (material number: **6063163**)



4WE 10 J **A01**-24DG/V (material number: **4290238**)

## ADVANTAGES

- new, state-of-the-art assembly line
- application-specific valves are now possible
- high vertical integration
- increased maximum pressure
- Increased maximum flow rate
- reduced nominal power consumption
- traceability due to serial number and QR- Code
- all coil types are selectable

## SYMBOLS

### 4/2- directional spool valve

Spool type	Symbol	Intermediate position	Spool type	Symbol	Intermediate position
AE			HA		
BE			HB		
BJ			JA		
C			JB		
D			QA		
EA			UA		
EB			Y		
GA					
GB					

### 4/3- directional spool valve

Spool type	Symbol	Intermediate position	Spool type	Symbol	Intermediate position
E			L		
F			M		
G			P		
H			Q		
J			R		
L			U		

### Detent

...-OF



## OPTIONS

available with different:

- manual overrides
- coil connectors
- voltages
- spool types

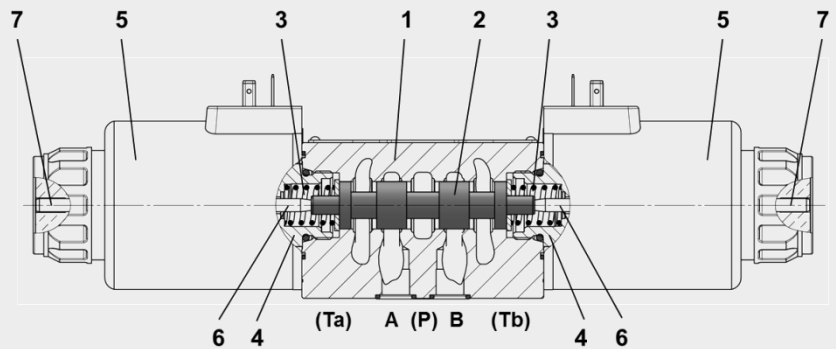
## FUNCTION

The solenoid-operated directional-spool valves of the series 4WE 10 are used to control the volume flow. They consist of a valve body (1) with associated valve piston (2). Dependent on the type the valve is equipped with at least two return springs (3) and in each case one or two pole tubes (4) and solenoid coils (5).

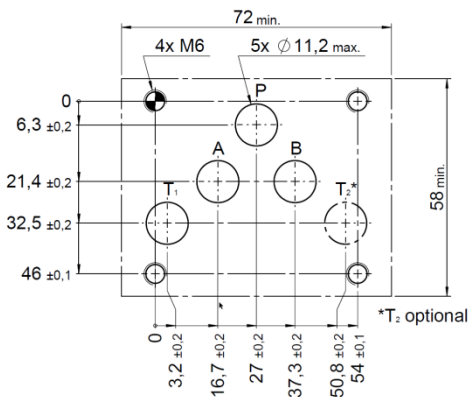
The hydraulic control of the valve is carried out through the actuation of the valve piston by the use of solenoids (5). Through the rod (6) the solenoid pushes the valve piston to the required position. This enables the volume flow directions between the appropriate connections.

When the solenoid is de-energised the appropriate spring resetting pushes the valve piston to its initial position.

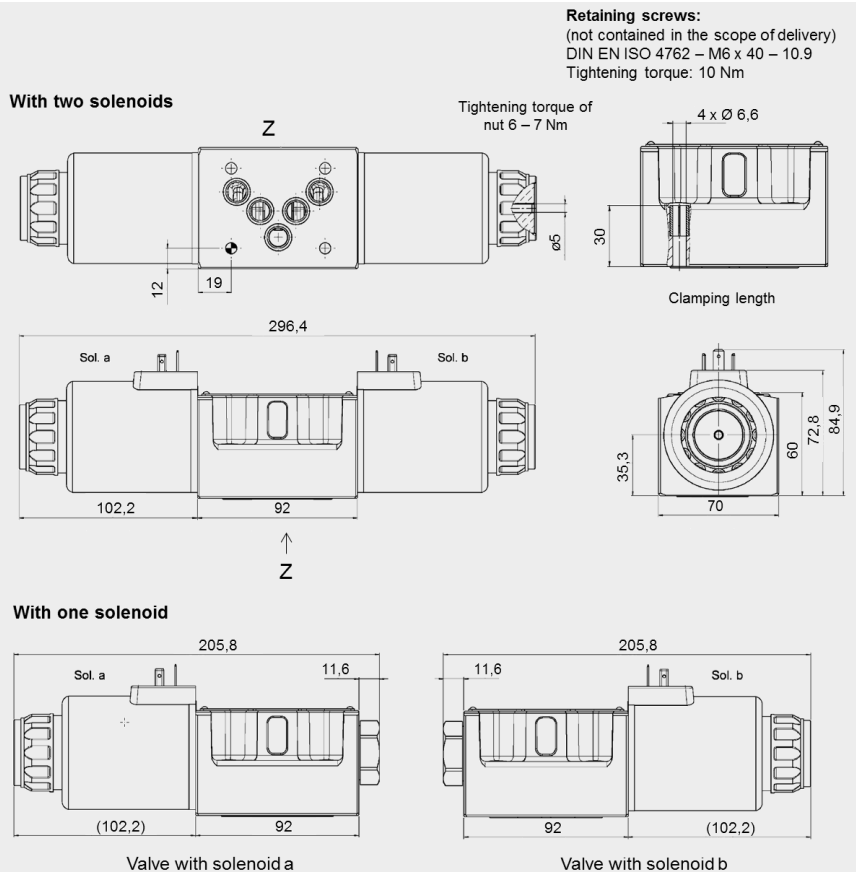
The optional manual override (7) enables the valve operation without solenoid energisation.



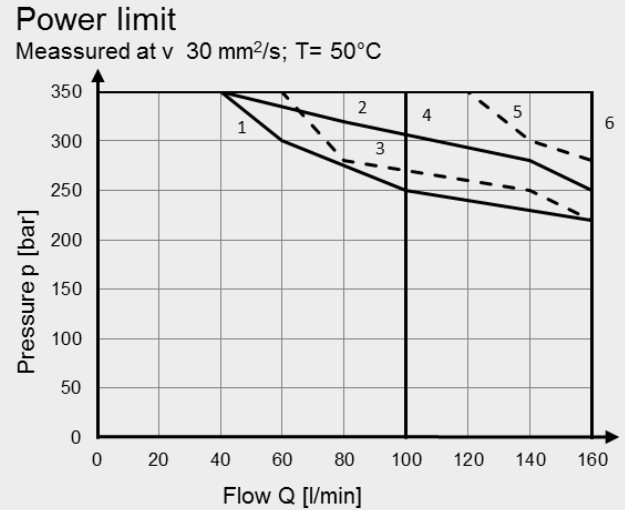
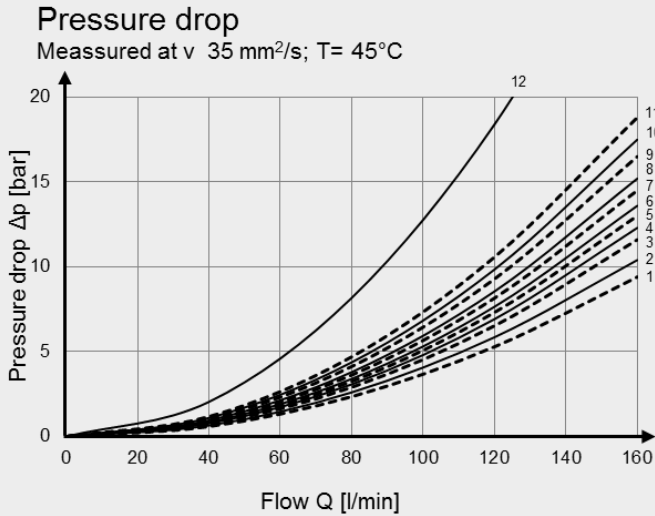
## ISO 4401-05-04-0-05



## DIMENSIONS



## CHARACTERISTICS



Allocation of performance curves with corresponding spool as shown in the table below.

Spool	Pressure drop					Operating limits
	P→A	B→T	P→B	A→T	P→T	
AE	-	-	6	8	-	5
BE	4	8	-	-	-	6
BJ	4	3	-	-	-	3
C	9	8	5	5	-	6
D	9	11	8	8	-	6
D-OF	6	5	6	5	-	4
E, EA, EB	4	6	7	7	-	6
F	-	-	-	-	-	-
G, GA	9	10	9	11	12	-
H, HA, HB	1	5	2	7	11	6
J, JA, JB	4	2	7	3	-	6
L	4	7	4	2	-	2
M	2	9	2	9	-	6
P	-	-	-	-	-	-
Q, QA	4	7	6	7	-	5
R	5	-	9	7	-	1
U, UA	4	3	4	7	-	2
Y	7	8	10	11	-	6

## QUESTIONS

For any queries, please contact your technical sales support or [valves@hydac.com](mailto:valves@hydac.com).

Best regards

Your Hydac Valve Team

A 01 - SERIES (new)			S 01 - SERIES (old)		
DESCRIPTION	#		DESCRIPTION	#	
4WE 10 AE A01-24DG/V	4295388	AE	4WE 10 AE S01-24DG/V	3833281	
4WE 10 BJ A01-0/V	4293991	BJ	4WE 10 BJ S01-0/V	3627689	
4WE 10 BJ A01-12DG/V	4293730		4WE 10 BJ S01-12DG/V	-	
4WE 10 BJ A01-24DG/V	4293679	C	4WE 10 BJ S01-24DG/V	-	
4WE 10 C A01-0/V	4295390		4WE 10 C S01-0/V	3612796	
-	-		4WE 10 C S01-125DG/V	6077277	
4WE 10 C A01-24DG/N	4295391		4WE 10 C S01-24DG/N	6083679	
4WE 10 C A01-96DG/N	4295392	D	4WE 10 C S01-96DG/N	6142426	
4WE 10 D A01-0/V	4293733		4WE 10 D S01-0/V	6085149	
-	-		4WE 10 D S01-125DG/N	6106554	
-	-		4WE 10 D S01-125DG/V	6077276	
4WE 10 D A01-12DG/N	4295394		4WE 10 D S01-12DG/N	6071723	
4WE 10 D A01-12DG/V	4293732		4WE 10 D S01-12DG/V	6063149	
4WE 10 D A01-205DG/N	4295396		4WE 10 D S01-205DG/N	6106555	
4WE 10 D A01-205DG/V	4295395		4WE 10 D S01-205DG/V	6091089	
4WE 10 D A01-24DG/N	4295397		4WE 10 D S01-24DG/N	6071731	
4WE 10 D A01-24DG/V	4290241		4WE 10 D S01-24DG/V *	6063155	
-	-		4WE 10 D S01-24DO/N	6070024	
-	-		4WE 10 D S01-24DO/V	6106552	
-	-		4WE 10 D S01-28DT01 *	6075706	
4WE 10 D A01-96DG/V	4295398		4WE 10 D S01-96DG/V	3562935	
4WE 10 D-OF A01-0/V	4293737		D-OF	4WE 10 D-OF S01-0/V	6085115
4WE 10 D-OF A01-12DG/V	4293735			4WE 10 D-OF S01-12DG/V	-
4WE 10 D-OF A01-205DG/V	4295399	4WE 10 D-OF S01-205DG/V		4039703	
4WE 10 D-OF A01-24DG/N	4295400	4WE 10 D-OF S01-24DG/N *		6082085	
4WE 10 D-OF A01-24DG/V	4293725	4WE 10 D-OF S01-24DG/V		6083734	
-	-	4WE 10 D-OF S01-24DO/N		6070026	
-	-	4WE 10 D-OF S01-24DO/V		6106437	
4WE 10 D-OF A01-96DG/N	4295401	4WE 10 D-OF S01-96DG/N		6106370	
4WE 10 D-OF A01-96DG/V	4295402	4WE 10 D-OF S01-96DG/V		3562911	
4WE 10 E A01-0/V	4293739	E		4WE 10 E S01-0/V *	6084237
4WE 10 E A01-12DG/N	4295403		4WE 10 E S01-12DG/N	6071735	
4WE 10 E A01-12DG/V	4293738		4WE 10 E S01-12DG/V	6063151	
4WE 10 E A01-205DG/N	4295404		4WE 10 E S01-205DG/N	6106464	
4WE 10 E A01-205DG/V	4295405		4WE 10 E S01-205DG/V *	6079544	
4WE 10 E A01-24DG/N	4295406		4WE 10 E S01-24DG/N	6071736	
4WE 10 E A01-24DG/V	4290137		4WE 10 E S01-24DG/V *	6063157	
-	-		4WE 10 E S01-24DO/N	6070022	
-	-		4WE 10 E S01-24DO/V	6106462	
4WE 10 E A01-96DG/V	4295407		4WE 10 E S01-96DG/V	3718530	

A 01 - SERIES (new)			S 01 - SERIES (old)	
DESCRIPTION	#		DESCRIPTION	#
4WE 10 EA A01-0/V	4293741	EA	4WE 10 EA S01-0/V	3564311
4WE 10 EA A01-12DG/N	4295408		4WE 10 EA S01-12DG/N	6071732
4WE 10 EA A01-12DG/V	4293740		4WE 10 EA S01-12DG/V	6063150
4WE 10 EA A01-205DG/V	4295409		4WE 10 EA S01-205DG/V	3718532
4WE 10 EA A01-24DG/N	4295410		4WE 10 EA S01-24DG/N	6071734
4WE 10 EA A01-24DG/V	4293715		4WE 10 EA S01-24DG/V	6063156
	-		4WE 10 EA S01-24DO/N	6082132
	-		4WE 10 EA S01-24DO/V	6106556
4WE 10 EA A01-96DG/V	4295411		4WE 10 EA S01-96DG/V	3718531
4WE 10 EB A01-0/V	4293743		EB	4WE 10 EB S01-0/V
4WE 10 EB A01-12DG/V	4293742	4WE 10 EB S01-12DG/V		-
4WE 10 EB A01-24DG/N	4295412	4WE 10 EB S01-24DG/N		6106558
4WE 10 EB A01-24DG/V	4293716	4WE 10 EB S01-24DG/V		6084194
-		F	4WE 10 F S01-24DG/V	3964715
4WE 10 G A01-0/V	4295522	G	4WE 10 G S01-0/V	3564313
4WE 10 G A01-12DG/N	4295537		4WE 10 G S01-12DG/N	6071737
4WE 10 G A01-12DG/V	4295536		4WE 10 G S01-12DG/V	6063152
4WE 10 G A01-205DG/N	4295538		4WE 10 G S01-205DG/N	6106468
4WE 10 G A01-205DG/V	4295539		4WE 10 G S01-205DG/V	6079542
4WE 10 G A01-24DG/N	4295540		4WE 10 G S01-24DG/N *	6071738
4WE 10 G A01-24DG/V	4295541		4WE 10 G S01-24DG/V	6063158
	-		4WE 10 G S01-24DO/N	6082131
	-		4WE 10 G S01-24DO/V	6106465
4WE 10 G A01-96DG/V	4295542		4WE 10 G S01-96DG/V	3718533
4WE 10 GA A01-0/V	4295543	GA	4WE 10 GA S01-0/V	3564349
4WE 10 GA A01-24DG/N	4295544		4WE 10 GA S01-24DG/N *	6082086
4WE 10 GA A01-24DG/V	4295565		4WE 10 GA S01-24DG/V	3604885
	-		4WE 10 GA S01-24DO/N	6082128
	-		4WE 10 GA S01-24DO/V	6106559
4WE 10 H A01-0/V	4293777	H	4WE 10 H S01-0/V	3564312
4WE 10 H A01-12DG/N	4295413		4WE 10 H S01-12DG/N	6071739
4WE 10 H A01-12DG/V	4293776		4WE 10 H S01-12DG/V	6063153
4WE 10 H A01-205DG/N	4295414		4WE 10 H S01-205DG/N	6106482
4WE 10 H A01-205DG/V	4295415		4WE 10 H S01-205DG/V	6082310
4WE 10 H A01-24DG/N	4295416		4WE 10 H S01-24DG/N	6071740
4WE 10 H A01-24DG/V	4290236		4WE 10 H S01-24DG/V	6063161
	-		4WE 10 H S01-24DO/N	6082130
	-		4WE 10 H S01-24DO/V	6106470
4WE 10 H A01-96DG/V	4295418		4WE 10 H S01-96DG/V	3718534

A 01 - SERIES (new)			S 01 - SERIES (old)	
DESCRIPTION	#		DESCRIPTION	#
4WE 10 HA A01-0/V	4293779	HA	4WE 10 HA S01-0/V	3564350
4WE 10 HA A01-12DG/V	4293778		4WE 10 HA S01-12DG/V	6142428
4WE 10 HA A01-205DG/V	4295419		4WE 10 HA S01-205DG /V	3639078
4WE 10 HA A01-24DG/N	4295421		4WE 10 HA S01-24DG/N *	6082083
4WE 10 HA A01-24DG/V	4293719		4WE 10 HA S01-24DG/V *	6071730
4WE 10 HB A01-0/V	4293993		HB	4WE 10 HB S01-0/V
4WE 10 HB A01-12DG/V	4293992	4WE 10 HB S01-12DG/V		-
4WE 10 HB A01-24DG/V	4293721	4WE 10 HB S01-24DG/V		-
4WE 10 J A01-0/V	4293781	J	4WE 10 J S01-0/V *	6084239
4WE 10 J A01-12DG/N	4295424		4WE 10 J S01-12DG/N	6071741
4WE 10 J A01-12DG/V	4293780		4WE 10 J S01-12DG/V	6063154
4WE 10 J A01-205DG/N	4295445		4WE 10 J S01-205DG/N	6106488
4WE 10 J A01-205DG/V	4295447		4WE 10 J S01-205DG/V	6075977
4WE 10 J A01-24DG/N	4295448		4WE 10 J S01-24DG/N	6071742
4WE 10 J A01-24DG/V	4290238		4WE 10 J S01-24DG/V *	6063163
	-		4WE 10 J S01-24DO/N	6070023
	-		4WE 10 J S01-24DO/V	6106484
4WE 10 J A01-96DG/N	4295450		4WE 10 J S01-96DG/N	6106487
4WE 10 J A01-96DG/V	4295449		4WE 10 J S01-96DG/V	3562914
4WE 10 JA A01-0/V	4293783	JA	4WE 10 JA S01-0/V	3564345
4WE 10 JA A01-12DG/V	4293782		4WE 10 JA S01-12DG/V	3984360
4WE 10 JA A01-24DG/N	4295452		4WE 10 JA S01-24DG/N	6073072
4WE 10 JA A01-24DG/V	4293723		4WE 10 JA S01-24DG/V	6080115
	-		4WE 10 JA S01-24DO/N	6082129
	-		4WE 10 JA S01-24DO/V	6106563
4WE 10 JB A01-0/V	4293806	JB	4WE 10 JB S01-0/V	-
4WE 10 JB A01-12DG/V	4293805		4WE 10 JB S01-12DG/V	-
4WE 10 JB A01-24DG/N	4295453		4WE 10 JB S01-24DG/N	6083663
4WE 10 JB A01-24DG/V	4293724		4WE 10 JB S01-24DG/V	6083490
4WE 10 L A01-0/V	4295469	L	4WE 10 L S01-0/V	4039785
4WE 10 L A01-205DG/V	4295468		4WE 10 L S01-205DG/V	4039704
4WE 10 L A01-24DG/N	4295467		4WE 10 L S01-24DG/N	6106489
4WE 10 L A01-24DG/V	4295466		4WE 10 L S01-24DG/V	6089359
4WE 10 M A01-0/V	4293808	M	4WE 10 M S01-0/V	-
4WE 10 M A01-12DG/V	4293807		4WE 10 M S01-12DG/V	-
4WE 10 M A01-24DG/N	4295454		4WE 10 M S01-24DG/N	3560771
4WE 10 M A01-24DG/V	4290240		4WE 10 M S01-24DG/V	6079530



A 01 - SERIES (new)			S 01 - SERIES (old)	
DESCRIPTION	#		DESCRIPTION	#
-		P	4WE 10 P S01-24DG/N	3560770
4WE 10 Q A01-24DG/N	4295471	Q	4WE 10 Q S01-24DG/N *	6082082
4WE 10 Q A01-24DG/V	4295470		4WE 10 Q S01-24DG/V	6086727
-	-		4WE 10 Q S01-24DO/N	6070025
-	-		4WE 10 Q S01-24DO/V	6106490
4WE 10 QA A01-24DG/N	4295474	QA	4WE 10 QA S01-24DG/N	6082084
4WE 10 QA A01-24DG/V	4295473		4WE 10 QA S01-24DG/V	6086728
-	-		4WE 10 QA S01-24DO/N	6082126
-	-		4WE 10 QA S01-24DO/V	6106565
4WE 10 R A01-24DG/N	4295476	R	4WE 10 R S01-24DG/N	3560772
4WE 10 R A01-24DG/V	4295475		4WE 10 R S01-24DG/V	6092334
4WE 10 U A01-96DG/V	4295478	U	4WE 10 U S01-96DG/V	3946194
4WE 10 Y A01-0/V	4293810	Y	4WE 10 Y S01-0/V	4025746
4WE 10 Y A01-12DG/V	4293809		4WE 10 Y S01-12DG/V	3827697
4WE 10 Y A01-205DG/V	4295483		4WE 10 Y S01-205DG/V	4025664
4WE 10 Y A01-24DG/N	4295515		4WE 10 Y S01-24DG/N	6080427
4WE 10 Y A01-24DG/V	4290242		4WE 10 Y S01-24DG/V	6084238
4WE 10 Y A01-96DG/N	4295520		Y-OF	4WE 10 Y S01-96DG/N
4WE 10 Y A01-96DG/V	4295519	4WE 10 Y S01-96DG/V		3589965