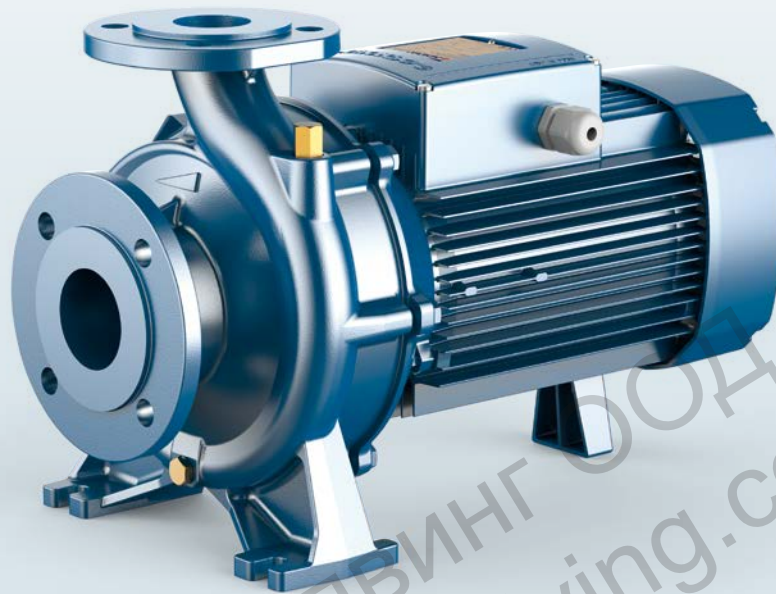
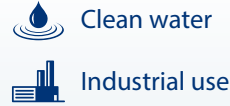


## Standardised "EN 733" centrifugal pumps



### PERFORMANCE RANGE

- Flow rate up to **6000 l/min** (360 m<sup>3</sup>/h)
- Head up to **98 m**

### APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C**
- Max. pressure in pump body **10 bar** (PN10)
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



Pump body dimensions in compliance with **EN 733**

**EU REGULATION N. 547/2012**

### INSTALLATION AND USE

- Water supply
- Pressure boosting
- Irrigation
- Water circulation in air-conditioning units
- Cleaning sets
- Firefighting sets
- Industrial applications
- Agricultural applications

Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

### OPTIONS AVAILABLE ON REQUEST

- Counter flange KIT complete with bolts, nuts and washers
- Special mechanical seal
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder environments

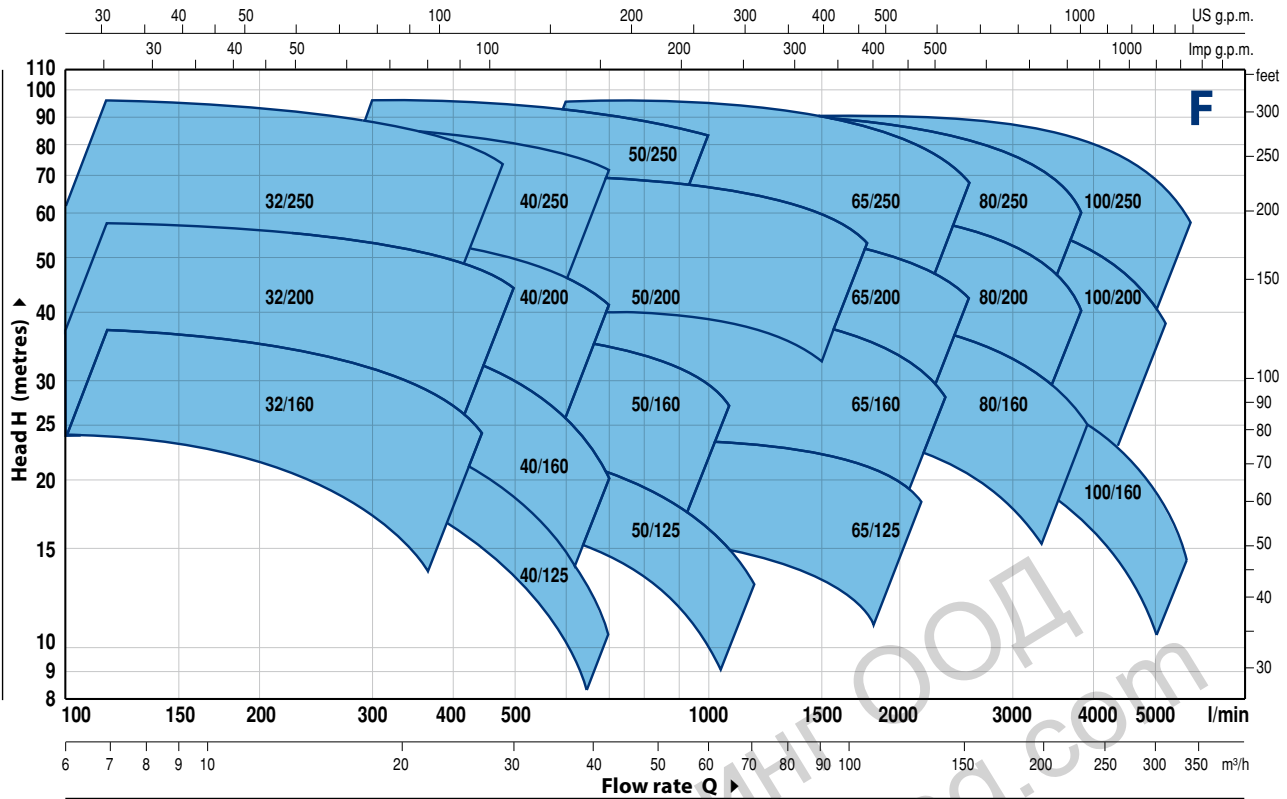
### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY



## PERFORMANCE RANGE

50 Hz n= 2900 min<sup>-1</sup>



## PERFORMANCE DATA

50 Hz n= 2900 min<sup>-1</sup>

MODEL	POWER (P <sub>2</sub> )		▲	PERFORMANCE	
	kW	HP		Q l/min	H metres
F 32/160C	1.5	2	IE3	100 – 350	24 – 14
F 32/160B	2.2	3		100 – 400	30 – 17
F 32/160A	3	4		100 – 450	37 – 24
F 32/200C	4	5.5		100 – 450	44 – 31.5
F 32/200B	5.5	7.5		100 – 500	51 – 36
F 32/200A	7.5	10		100 – 500	57 – 44
F 32/200BH	3	4		100 – 300	45 – 37
F 32/200AH	4	5.5		100 – 320	55 – 44
F 32/250C	9.2	12.5		100 – 450	75 – 60
F 32/250B	11	15		100 – 500	87 – 70
F 32/250A	15	20		100 – 500	97 – 80
F 40/125C	1.1	1.5		100 – 550	16 – 6
F 40/125B	1.5	2		100 – 600	20.5 – 9
F 40/125A	2.2	3		100 – 700	26 – 10
F 40/160C	2.2	3		100 – 600	27 – 14
F 40/160B	3	4		100 – 600	32 – 20
F 40/160A	4	5.5	100 – 700	38 – 20	
F 40/200B	5.5	7.5	100 – 700	47 – 28	
F 40/200A	7.5	10	100 – 700	55 – 41	
F 40/250C	9.2	12.5	100 – 700	64 – 47	
F 40/250B	11	15	100 – 700	71 – 55	
F 40/250A	15	20	100 – 700	88 – 72	
F 50/125C	2.2	3	IE3	300 – 1200	17.5 – 6
F 50/125B	3	4		300 – 1200	20.7 – 9
F 50/125A	4	5.5		300 – 1200	23.5 – 13
F 50/160C	4	5.5		300 – 1000	27 – 16
F 50/160B	5.5	7.5		300 – 1100	32 – 21
F 50/160A	7.5	10		300 – 1100	37 – 27
F 50/200C	11	15		400 – 1700	44 – 30
F 50/200B	15	20		400 – 1700	52 – 38
F 50/200A	18.5	25		400 – 1800	61 – 45
F 50/200AR	22	30		400 – 1800	69 – 53
F 50/250D	9.2	12.5		300 – 900	51 – 32
F 50/250C	11	15		300 – 900	59 – 42
F 50/250B	15	20		300 – 1000	72 – 59
F 50/250A	18.5	25		300 – 1000	85 – 73
F 50/250AR	22	30		300 – 1000	95 – 83

MODEL	POWER (P <sub>2</sub> )		▲	PERFORMANCE	
	kW	HP		Q l/min	H metres
F 65/125C	4	5.5	IE3	600 – 1800	16 – 11
F 65/125B	5.5	7.5		600 – 2000	18 – 13
F 65/125A	7.5	10		600 – 2200	23 – 18
F 65/160C	9.2	12.5		600 – 2200	32 – 22
F 65/160B	11	15		600 – 2400	36.5 – 23
F 65/160A	15	20		600 – 2400	40.5 – 28
F 65/200B	15	20		200 – 2400	44 – 30.5
F 65/200A	18.5	25		200 – 2500	50 – 36.5
F 65/200AR	22	30		200 – 2600	57 – 42
F 65/250C	30	40		400 – 2350	76 – 53
F 65/250B	37	50		400 – 2500	87 – 62
F 65/250A	45	60		400 – 2600	95 – 68
F 80/160D	11	15		500 – 4000	25 – 10
F 80/160C	15	20		500 – 4000	30 – 15
F 80/160B	18.5	25		500 – 4000	35 – 20
F 80/160A	22	30		500 – 4000	40 – 25
F 80/200B	30	40	500 – 3650	56 – 34.5	
F 80/200A	37	50	500 – 3900	62 – 40	
F 80/250B	45	60	600 – 3600	77 – 54	
F 80/250A	55	75	600 – 3900	88.5 – 60	
F 100/160C	15	20	IE3	1000 – 5000	30 – 12
F 100/160B	18.5	25		1000 – 5200	34 – 14.5
F 100/160A	22	30		1000 – 5500	38 – 17.5
F 100/200C	30	40		833 – 4650	51 – 28
F 100/200B	37	50		833 – 4900	57 – 33
F 100/200A	45	60		833 – 5250	63 – 38
F 100/250B	55	75		800 – 5150	75 – 48
F 100/250A	75	100		800 – 5750	89 – 58

Q = Flow rate

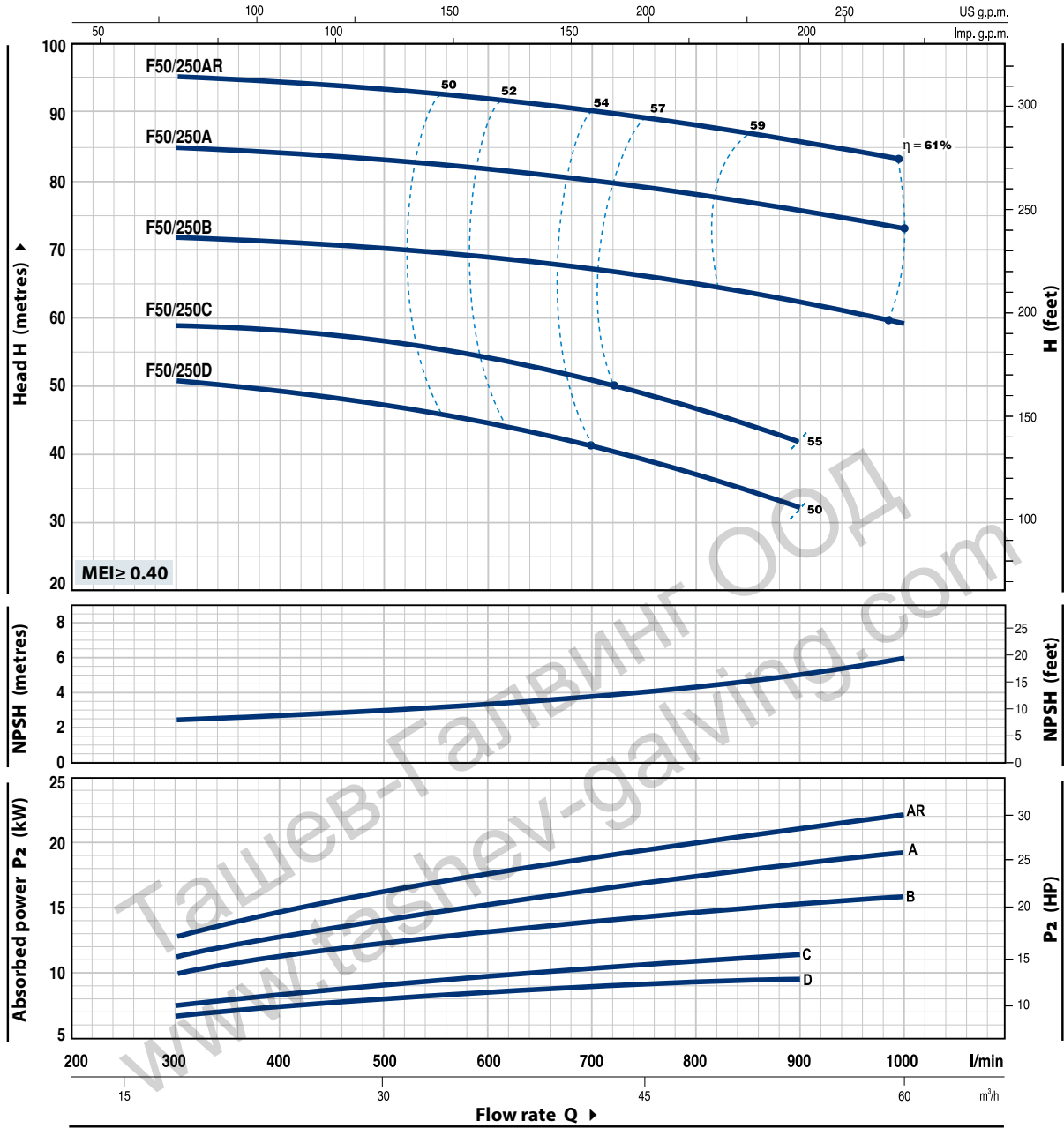
H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min<sup>-1</sup> HS= 0 m



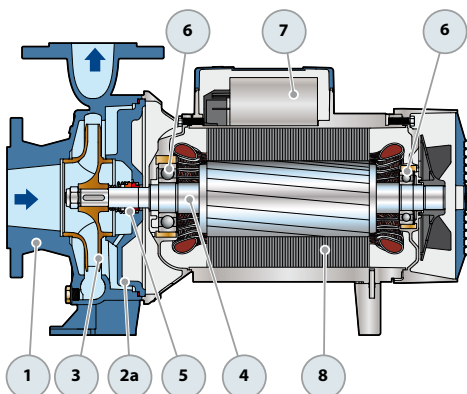
MODEL	POWER (P <sub>2</sub> )		Q	Flow rate										
	kW	HP		m <sup>3</sup> /h	0	18	24	30	36	42	48	54	60	
Three-phase			l/min	0	300	400	500	600	700	800	900	1000		
F 50/250D	9.2	12.5	H metres	51	51	49	47	44	41	37	32			
F 50/250C	11	15		59	59	58	57	54	51	47	42			
F 50/250B	15	20		72	72	71	70	69	67	65	62	59		
F 50/250A	18.5	25		85	85	84	83	82	80	78	76	73		
F 50/250AR	22	30		95	95	94	93	92	90	88	86	83		

Q=Flow rate H=Total manometric head HS = Suction height

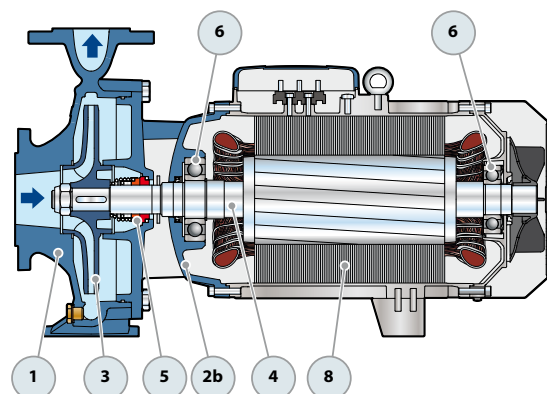
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

<b>1 PUMP BODY</b>	Cast iron complete with flanged suction and delivery ports					
<b>2a BODY BACKPLATE</b>	Cast iron for F32/160, F32/200, F40/125, F40/160, F40/200, F50/125, F50/160, F65/125					
<b>2b MOTOR BRACKET</b>	Cast iron for F32/250, F40/250, F50/200, F50/250, F65/160, F65/200, F65/250, F80/160, F80/200, F80/250, F100/160, F100/200, F100/250					
<b>3 IMPELLER</b>	Brass for F32/160, F32/200, F40/125, F40/160, F40/200, F50/125, F50/160 Cast iron for F32/250, F40/250, F50/200, F50/250, F65/125, F65/160, F65/200, F65/250, F80/160, F80/200, F80/250, F100/160, F100/200, F100/250					
<b>4 MOTOR SHAFT</b>	Stainless steel AISI 431					
<b>5 MECHANICAL SEAL</b>	<b>Pump</b>	<b>Seal</b>	<b>Shaft</b>	<b>Materials</b>		
	<b>Model</b>	<b>Model</b>	<b>Diameter</b>	<b>Stationary ring</b>	<b>Rotational ring</b>	<b>Elastomer</b>
	F32/160, F40/125, F40/160, F50/125	<b>FN-20</b>	<b>Ø 20 mm</b>	Graphite	Ceramic	NBR
	F32/200, F40/200, F50/160, F65/125	<b>FN-24</b>	<b>Ø 24 mm</b>	Graphite	Ceramic	NBR
	F50/200, F65/160, F65/200, F80/160, F100/160	<b>FN-32 NU</b>	<b>Ø 32 mm</b>	Graphite	Ceramic	NBR
	F32/250, F40/250, F50/250	<b>FN-38</b>	<b>Ø 38 mm</b>	Graphite	Ceramic	NBR
	F65/250, F80/200, F80/250B, F100/200, F80/250A, F100/250	<b>FN-40 NU</b> <b>FH-45 NU</b>	<b>Ø 40 mm</b> <b>Ø 45 mm</b>	Graphite	Ceramic	NBR
<b>6 BEARINGS</b>	<b>Pump</b>	<b>Model</b>	<b>Pump</b>	<b>Model</b>		
	F32/160C F40/160C F32/160B F50/125C F40/125	<b>6206 ZZ-C3 / 6204 ZZ</b>	F32/250 F50/200 F40/250 F65/160 F50/250 F80/160 F65/200 F100/160	<b>6310 ZZ-C3 / 6308 ZZ-C3</b>		
	Fm32/160B F32/160A Fm40/160C F40/160B Fm50/125C F50/125B	<b>6206 ZZ-C3 / 6205 ZZ</b>	F65/250 F80/200 F80/250B F100/200	<b>6312 ZZ-C3 / 6212 ZZ-C3</b>		
	F40/160A F50/125A	<b>6306 ZZ-C3 / 6206 ZZ-C3</b>	F80/250A F100/250	<b>6314 ZZ-C3 / 6313 ZZ-C3</b>		
	F32/200 F40/200 F50/160 F65/125	<b>6307 ZZ-C3 / 6206 ZZ-C3</b>				
<b>7 CAPACITOR</b>	<b>Pump</b>	<b>Capacitance</b>				
	<b>Single-phase</b>	<b>(230 V or 240 V)</b>				
	Fm32/160C	<b>45</b> µF - 450 VL				
	Fm32/160B	<b>70</b> µF - 450 VL				
	Fm40/125C	<b>31.5</b> µF - 450 VL				
	Fm40/125B	<b>45</b> µF - 450 VL				
	Fm40/160C	<b>70</b> µF - 450 VL				
	Fm50/125C	<b>70</b> µF - 450 VL				
<b>8 ELECTRIC MOTOR</b>	<b>Fm:</b> single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding (up to 1.5 kW)					
	<b>F:</b> <b>three-phase 230/400 V - 50 Hz up to 4 kW</b> <b>400/690 V - 50 Hz from 5.5 to 75 kW</b>					
	<ul style="list-style-type: none"> <li>▀ The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)</li> <li>- Insulation: class F - Protection: IP 55</li> </ul>					

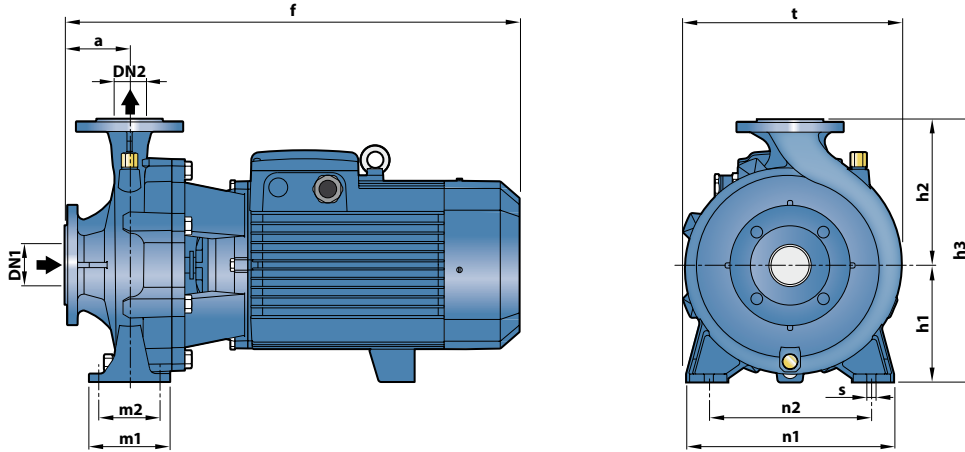


Single-phase version



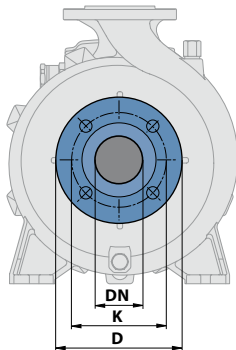
Three-phase version

## DIMENSIONS AND WEIGHT



MODEL		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	a	f	h1	h2	h3	t	n1	n2	m1	m2	s	1~	3~
Fm 50/125C	F 50/125C	65	50	100	465/451	132	160	292	242	240	190	100	70	14	36.8	35.1
-	F 50/125B				465										-	38.5
-	F 50/125A				484										-	42.8
-	F 50/160C				489										-	47.3
-	F 50/160B				535	180	340	273	265	212	-	52.8				
-	F 50/160A					-	57.6									
-	F 50/200C				616	200	360	316.5	-	100.0						
-	F 50/200B				711	-	115.0									
-	F 50/200A				743	-	127.2									
-	F 50/200AR				605	-	141.0									
-	F 50/250D					-	104.2									
-	F 50/250C					-	105.0									
-	F 50/250B					701	180	225	405	333	320	250	-		121.0	
-	F 50/250A				733	-	134.2									
-	F 50/250AR					-	147.0									

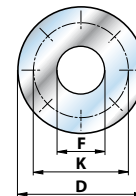
## FLANGED PORTS



DN FLANGES	D	K	HOLES	
			N°	Ø (mm)
32	140	100	4	18
40	150	110		
50	165	125		
65	185	145		
80	200	160	8	18
100	220	180		
125	250	210		

## COUNTER FLANGES

(CAN BE ORDERED SEPARATELY)



DN FLANGES	F	D	K	HOLES	
				COUNTERFLANGES	N°
32	1¼"	140	100	4	18
40	1½"	150	110		
50	2"	165	125		
65	2½"	185	145		
80	3"	200	160	8	18
100	4"	220	180		
125	5"	250	210		