

# ARMSTRONG



## PiB (Pump-in-a-Box) 4380 & 4392 Series

FILE NO:	2-4
DATE:	July 2010
SUPERSEDES:	2-4
DATE:	January 2009

# Guaranteed In Stock... At The Right Price!



The PiB series builds on the high quality and unsurpassed performance you've come to expect from Armstrong. PiB (Pump-in-a-Box) models are packaged for warehouse distribution and, for a large selection of sizes, guaranteed for delivery within 72 hours from order. All other sizes are delivered seven working days from order. Current PiB offerings include the 4380 single head in line range in fixed speed and Intelligent Variable Speed (IVS) Sensorless versions and the 4392 twin in line range in fixed speed and IVS Sensorless versions. The offering covers an extensive range of predetermined impeller and motor combinations, covering a wide range of head and flow requirements. Think inside the box!

## ► Direct Replacement

Have a broken pump from another supplier? Replace it with a brand new PiB Series pump from Armstrong! PiB 4380 and 4392 pumps are offered with BSP connections or BS4504 flanges, bronze impellers as standard and off the shelf IEC fixed speed motors. The wide array of connection sizes, impeller diameters and motors allow for a simple replacement of almost any pump.

## ► IVS Sensorless Pumps

Over the years, Armstrong has been synonymous with efficiency and energy cost savings. The PiB 4380 and 4392 IVS Sensorless pumps are the next generation in variable speed pumps, offering the element of intelligence. Our IVS Sensorless pumps can effectively and accurately replicate a typical variable volume system which would normally utilise a remote differential pressure transducer. The IVS Sensorless controller can achieve the operating cost saving benefits of a traditional variable volume system, without the added installation expense and complexity of a remote pressure sensor. The first true plug and play intelligent pump on the market, available only from Armstrong.

## ► IVS Sensorless Retrofit

Existing constant speed pumps can seamlessly be upgraded to a PiB IVS Sensorless 4380 or 4392 in systems with 2-way control valves. Simply install the IVS Sensorless 4380 or 4392 into the pipeline with the same installation method used for constant speed pumps. Expensive modifications to your current piping system or building structure are no longer required to minimise operating costs. An integrated dial makes



it easy to adjust the required system head (exclusive to the IVS Sensorless series) Simply turn the dial to match the system demand to and instantly maximise your energy savings. No specialised technicians or complicated electronic devices are required!

## ► Efficiency

Mechanically sealed pumps have far greater operating efficiency when compared to canned rotor induction designs thereby reducing power consumption and energy bills.

## ► Quality

Over the years, Armstrong vertical in line pumps have been installed in thousands of applications all over the world and have demonstrated high performance, consistent efficiency and maximum durability. The Armstrong 1A mechanical seal utilises silicon carbide which makes our seal one of the most reliable on the market today.

## ► Ease Of Maintenance

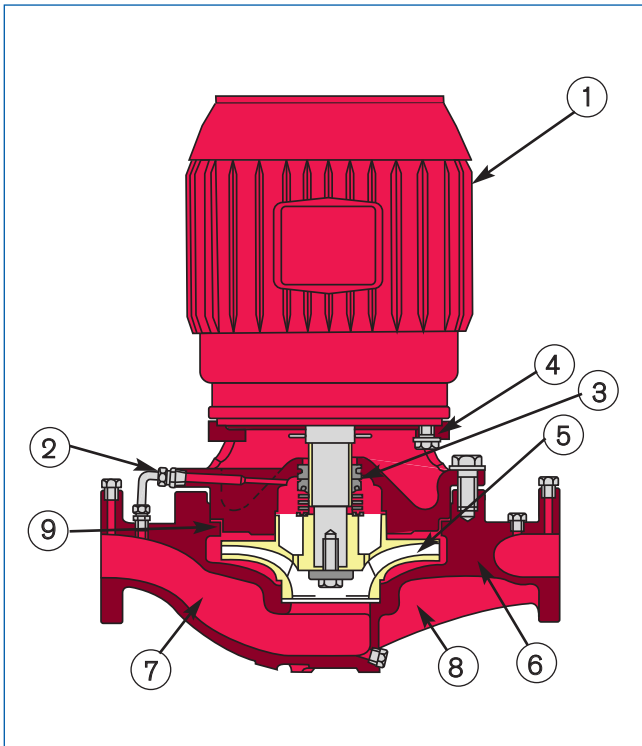
Pump maintenance remains identical to configured Armstrong pumps, which are designed to allow quick and effortless service. Since the PiB Series is based on current proven Armstrong pumps, replacement parts are readily available. All the PiB Series pumps utilise industry standard mechanical seals, ensuring quick and economical service. Downtime is therefore minimised in the event of regular scheduled maintenance.

## ► Reduced Footprint

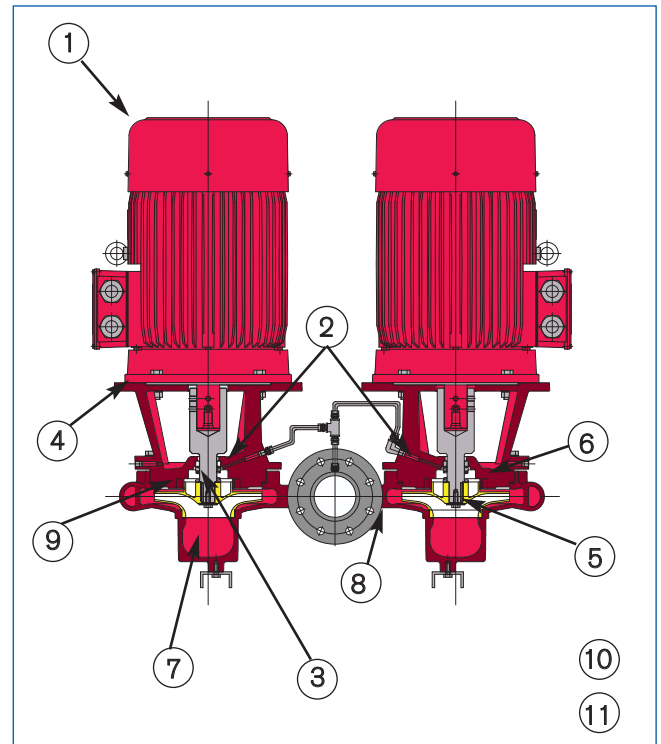
Armstrong vertical in line single and twin pumps have been designed to be mounted directly into the pipeline without floor support. Base mounted end suction long coupled and belt driven pumps can easily be replaced with pipeline mounted in line pumps to free up valuable floor space.

# PiB 4380 & 4392 Series

## ► Series 4380



## ► Series 4392



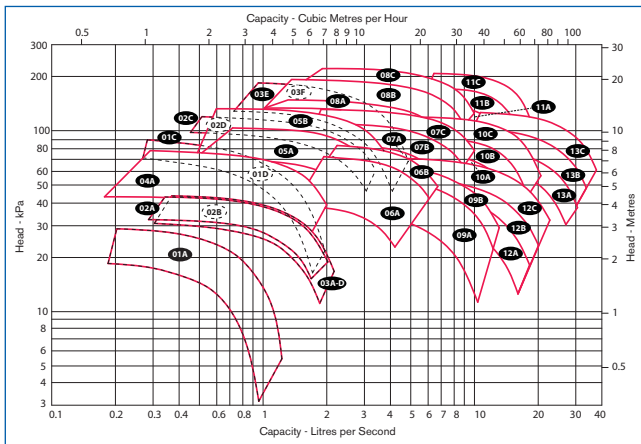
## ► Design Features

- ① IEC standard face or flange mount motor.
- ② Flush and vent connection removes entrained air and ensures liquid at seal face at all times.
- ③ Inside type mechanical seal serviceable without breaking pipe connections.
- ④ Heavy cylindrical bracket with 360° register on both flanges provides a rigid union of pump and motor.
- ⑤ Dynamically balanced impeller assures smooth vibration-free operation.
- ⑥ Radially split casing with equal and discharge flange sizes. Separate tapped openings for gauge, flush and drain connections.
- ⑦ Liberal inlet passageways and straightening vanes provide optimum suction performance and quiet operation.
- ⑧ Ribs cast integral with casing. Machined surface to accept floor support when specified.
- ⑨ Confined casing gasket to meet stringent industrial temperature and pressure applications.
- ⑩ 4392 Twin in-line range offers the most compact duty / standby arrangement.
- ⑪ 4392 Twin in-line range includes a mounting point for an optional blanking plate used when maintenance to a pump head is required.

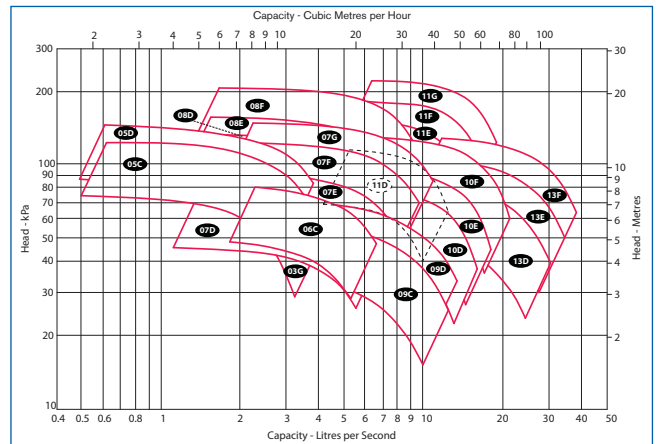
## ► Typical Applications

- Cooling and heating systems.
- Pressure boosting systems.
- Industrial applications requiring a compact pump.
- OEM (Cooling tower, spray washer, fountain, etc.).

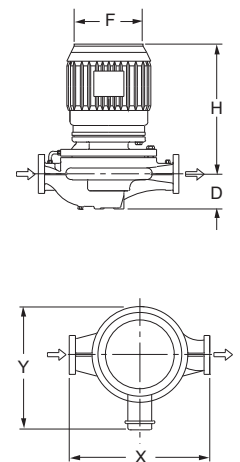
### ► Performance Curve - 4380



### ► Performance Curve - 4380 IVS



Performance Curve	Model	Part Number	Inlet & Outlet	kW	Nominal Speed	Dimensions (mm)					Weight (kg)	
						X	Y	D	F	H		
4380	01A	4380 25-90 AB 0.12 1PH	SLB025090GAF4101	1" BSP female	0.12	1450 rpm	180	140	65	121	245	9 kg
	01B	4380 25-90 AB 0.12 3PH	SLB025090GAF4301	1" BSP female	0.12	1450 rpm	180	140	65	121	245	9 kg
	01C	4380 25-90 AB 0.25 3PH	SLB025090GAF2302	1" BSP female	0.25	2900 rpm	180	140	65	121	245	9 kg
	01D	4380 25-90 AB 0.25 1PH	SLB025090GAF2102	1" BSP female	0.25	2900 rpm	180	165	65	121	245	9 kg
	02A	4380 32-105 AB 0.25 1PH	SLB032105GAF4102	1.25" BSP female	0.25	1450 rpm	225	165	75	138	270	11 kg
	02B	4380 32-105 AB 0.25 3PH	SLB032105GAF4302	1.25" BSP female	0.25	1450 rpm	225	165	75	138	270	11 kg
	02C	4380 32-105 AB 0.55 1PH	SLB032105GAF2104	1.25" BSP female	0.55	2900 rpm	225	165	75	138	270	11 kg
	02D	4380 32-105 AB 0.55 3PH	SLB032105GAF2304	1.25" BSP female	0.55	2900 rpm	225	165	75	138	270	11 kg
	03A	4380 32-120 BF 0.25 1PH	SLB032120NAF4102	1.25" BSP female	0.25	1450 rpm	285	131	46	138	353	18 kg
	03B	4380 32-120 BF 0.25 1PH	SLB032120GAF4102	35mm ID tailpiece	0.25	1450 rpm	285	131	46	138	353	18 kg
	03C	4380 32-120 BF 0.25 3PH	SLB032120NAF4302	1.25" BSP female	0.25	1450 rpm	285	131	46	138	353	18 kg
	03D	4380 32-120 BF 0.25 3PH	SLB032120GAF4302	35mm ID tailpiece	0.25	1450 rpm	285	131	46	138	353	18 kg
	03E	4380 32-120 BF 1.1 3PH	SLB032120NAF2302	1.25" BSP female	1.1	2900 rpm	285	131	46	156	400	21 kg
	03F	4380 32-120 BF 1.1 3PH	SLB032120GAF2306	35mm ID tailpiece	1.1	2900 rpm	285	131	46	156	400	21 kg
	04A	4380 40-150 BF 0.55 3PH	SLA040150NAF4304	40mm PN16	0.55	1450 rpm	362	196	125	156	385	44 kg
	05A	4380 40-200 BF 0.55 3PH	SLA040200NAF4304	40mm PN16	0.55	1450 rpm	407	196	125	156	386	60 kg
	05B	4380 40-200 BF 0.75 3PH	SLA040200NAF4305	40mm PN16	0.75	1450 rpm	407	196	125	156	386	61 kg
	06A	4380 50-150 BF 0.55 3PH	SLA050150NAF4304	50mm PN16	0.55	1450 rpm	381	196	133	156	386	55 kg
	06B	4380 50-150 BF 0.75 3PH	SLA050150NAF4305	50mm PN16	0.75	1450 rpm	381	196	133	156	386	56 kg
	07A	4380 50-200 BF 0.75 3PH	SLA050200NAF4305	50mm PN16	0.75	1450 rpm	458	196	133	156	386	68 kg
	07B	4380 50-200 BF 1.1 3PH	SLA050200NAF4306	50mm PN16	1.1	1450 rpm	458	214	133	176	406	71 kg
	07C	4380 50-200 BF 1.5 3PH	SLA050200NAF4307	50mm PN16	1.5	1450 rpm	458	214	133	176	431	73 kg
	08A	4380 50-250 BF 1.5 3PH	SLA050250NAF4307	50mm PN16	1.5	1450 rpm	483	214	140	176	432	93 kg
	08B	4380 50-250 BF 2.2 3PH	SLA050250NAF4308	50mm PN16	2.2	1450 rpm	483	232	140	194	464	97 kg
	08C	4380 50-250 BF 3.0 3PH	SLA050250NAF4309	50mm PN16	3.0	1450 rpm	483	232	140	194	464	100 kg
	09A	4380 80-150 BF 0.55 3PH	SLA080150NAF4304	80mm PN16	0.55	1450 rpm	458	196	165	156	386	62 kg
	09B	4380 80-150 BF 0.75 3PH	SLA080150NAF4305	80mm PN16	0.75	1450 rpm	458	196	165	156	386	63 kg
	10A	4380 80-200 BF 1.1 3PH	SLA080200NAF4306	80mm PN16	1.1	1450 rpm	559	214	165	176	406	82 kg
	10B	4380 80-200 BF 1.5 3PH	SLA080200NAF4307	80mm PN16	1.5	1450 rpm	559	214	165	176	431	84 kg
	10C	4380 80-200 BF 2.2 3PH	SLA080200NAF4308	80mm PN16	2.2	1450 rpm	559	232	165	194	463	88 kg
	11A	4380 80-250 BF 2.2 3PH	SLA080250NAF4308	80mm PN16	2.2	1450 rpm	534	232	165	194	464	113 kg
	11B	4380 80-250 BF 3.0 3PH	SLA080250NAF4309	80mm PN16	3.0	1450 rpm	534	232	165	194	464	116 kg
	11C	4380 80-250 BF 4.0 3PH	SLA080250NAF4310	80mm PN16	4.0	1450 rpm	534	255	165	218	483	124 kg
	12A	4380 100-150 BF 0.55 3PH	SLA100150NAF4304	100mm PN16	0.55	1450 rpm	559	196	210	156	392	78 kg
	12B	4380 100-150 BF 0.75 3PH	SLA100150NAF4305	100mm PN16	0.75	1450 rpm	559	196	210	156	392	79 kg
	12C	4380 100-150 BF 1.1 3PH	SLA100150NAF4306	100mm PN16	1.1	1450 rpm	559	214	210	176	412	82 kg
13A	4380 100-200 BF 2.2 3PH	SLA100200NAF4308	100mm PN16	2.2	1450 rpm	635	232	210	194	461	108 kg	
13B	4380 100-200 BF 3.0 3PH	SLA100200NAF4309	100mm PN16	3.0	1450 rpm	635	232	210	194	461	112 kg	
13C	4380 100-200 BF 4.0 3PH	SLA100200NAF4310	100mm PN16	4.0	1450 rpm	635	255	210	218	543	120 kg	
4380 IVS	03G	4380S 32-120 BF 0.75 3PH	SLB032120NAV2305	1.25" BSP female	0.75	2900 rpm	304	170	46	156	431	34 kg
	05C	4380S 40-200 BF 0.55 3PH	SLA040200NAV4304	40mm PN16	0.55	1450 rpm	407	196	125	156	386	60 kg
	05D	4380S 40-200 BF 0.75 3PH	SLA040200NAV4305	40mm PN16	0.75	1450 rpm	407	196	125	156	386	61 kg
	06C	4380S 50-150 BF 0.55 3PH	SLA050150NAV4304	50mm PN16	0.55	1450 rpm	381	196	133	156	386	47 kg
	07D	4380S 50-200 BF 0.55 3PH	SLA050200NAV4304	50mm PN16	0.55	1450 rpm	458	196	133	156	386	59 kg
	07E	4380S 50-200 BF 0.75 3PH	SLA050200NAV4305	50mm PN16	0.75	1450 rpm	458	196	133	156	386	59 kg
	07F	4380S 50-200 BF 1.1 3PH	SLA050200NAV4306	50mm PN16	1.1	1450 rpm	458	214	133	176	406	79 kg
	07G	4380S 50-200 BF 1.5 3PH	SLA050200NAV4307	50mm PN16	1.5	1450 rpm	458	214	133	176	431	79 kg
	08D	4380S 50-250 BF 1.1 3PH	SLA050250NAV4306	50mm PN16	1.1	1450 rpm	483	214	140	176	407	75 kg
	08E	4380S 50-250 BF 1.5 3PH	SLA050250NAV4307	50mm PN16	1.5	1450 rpm	483	214	140	176	432	77 kg
	08F	4380S 50-250 BF 2.2 3PH	SLA050250NAV4308	50mm PN16	2.2	1450 rpm	483	232	140	194	464	112 kg
	09C	4380S 80-150 BF 0.55 3PH	SLA080150NAV4304	80mm PN16	0.55	1450 rpm	458	196	165	156	386	55 kg
	09D	4380S 80-150 BF 0.75 3PH	SLA080150NAV4305	80mm PN16	0.75	1450 rpm	458	196	165	156	386	74 kg
	10D	4380S 80-200 BF 1.1 3PH	SLA080200NAV4306	80mm PN16	1.1	1450 rpm	559	214	165	176	406	68 kg
	10E	4380S 80-200 BF 1.5 3PH	SLA080200NAV4307	80mm PN16	1.5	1450 rpm	559	214	165	176	431	71 kg
	10F	4380S 80-200 BF 2.2 3PH	SLA080200NAV4308	80mm PN16	2.2	1450 rpm	559	232	165	194	463	103 kg
	11D	4380S 80-250 BF 1.5 3PH	SLA080250NAV4307	80mm PN16	1.5	1450 rpm	534	214	165	176	432	94 kg
	11E	4380S 80-250 BF 2.2 3PH	SLA080250NAV4308	80mm PN16	2.2	1450 rpm	534	232	165	194	464	100 kg
11F	4380S 80-250 BF 3.0 3PH	SLA080250NAV4309	80mm PN16	3.0	1450 rpm	534	232	165	194	464	100 kg	
11G	4380S 80-250 BF 4.0 3PH	SLA080250NAV4310	80mm PN16	4.0	1450 rpm	534	255	165	218	483	134 kg	
13D	4380S 100-200 BF 2.2 3PH	SLA100200NAV4308	100mm PN16	2.2	1450 rpm	635	232	210	194	461	92 kg	
13E	4380S 100-200 BF 3.0 3PH	SLA100200NAV4309	100mm PN16	3.0	1450 rpm	635	232	210	194	461	92 kg	
13F	4380S 100-200 BF 4.0 3PH	SLA100200NAV4310	100mm PN16	4.0	1450 rpm	635	255	210	218	543	128 kg	



Note: All motors are 3-phase, 400v except: À 1-phase, 230v

## ► Selection Chart - 4380

1500 RPM    3000 RPM

### Head - Metres

	2	4	6	8	10	12	14	16	18	
1	01A-B	02A-B	01C-D	01C-D		02C-D				0.3
2	01A-B	03A-D	01C-D	01C-D	02C-D	02C-D				0.6
3	01A-B	03A-D	01C-D	08A	02C-D	02C-D	03E-F	03E-F	03E-F	0.8
4	03A-D	01C-D	01C-D	08A	02C-D	02C-D	03E-F	03E-F	03E-F	1.1
5	03A-D	01C-D	05A	08A	02C-D	02C-D	03E-F	03E-F	03E-F	1.4
6	03A-D	02A-B	05B	08A	02C-D	03E-F	03E-F	03E-F	03E-F	1.7
7	03A-D	02A-B	05B	08A	08B	08B	08C			1.9
				02C-D	02C-D	03E-F	03E-F	03E-F	03E-F	
8	06A	05A	05B	08A	08B	08C				2.2
				02C-D	03E-F	03E-F	03E-F			
9	06A	05A	05B	08A	08B	08C				2.5
				02C-D	03E-F	03E-F	03E-F			
10	06A	06A	05B	08A	08B	08C				2.8
			02C-D	02C-D	03E-F	03E-F	03E-F			
14	09A	06B	07B	08A	08B	08C				3.9
			03E-F	03E-F	03E-F	03E-F				
17	09A	06B	07C	08B	08B	08C				4.7
20	09A	07B	07C	08B	08C	08C				5.6
23	09A	10A	07C	08B	08C	011C				6.4
26	09A	10A	07C	08B	08C	011C				7.2
29	09A	10A	10C	08C	11B	011C				8.1
32	09A	10A	10C	11A	11C	011C				8.9
35	12A	10A	10C	11B	11C	011C				9.7
38	12A	10B	10C	11B	11C					10.6
41	12A	10B	10C	11B	11C					11.4
44	12B	10B	10C	11B	11C					12.2
47	12B	10B	10C	11B	11C					13.1
50	12B	10B	13C	11C	11C					13.9
53	12B	10C	13C	11C						14.7
56	12B	10C	13C	11C						15.6
59	12B	10C	13C	11C						16.4
62	12C	10C	13C	11C						17.2
65	12C	13A	13C							18.1
68	12C	13B	13C							18.9
71	12C	13B	13C							19.7
74	12C	13B	13C							20.6
77		13B	13C							21.4
80		13B	13C							22.2
83		13B	13C							23.1
86		13B	13C							23.9
89		13B	13C							24.7
92		13B	13C							25.6
95		13B								26.4
98		13B								27.2
101		13C								28.1
104		13C								28.9
107		13C								29.7
110		13C								30.6
113		13C								31.4
116		13C								32.2
119		13C								33.1
122		13C								33.9
	20	39	59	78	98	117	137	157	176	

### Pressure - kPa

Flow - Cubic Metres per Hour

Flow - Litres per Second

# 4380 & 4380 IVS

## ► Selection Chart - 4380 IVS

### Head - Metres

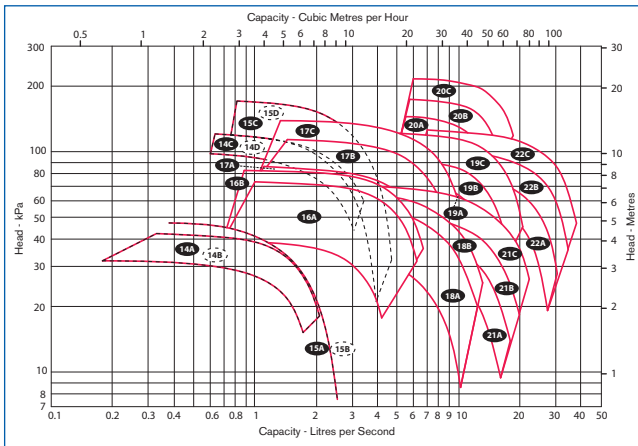
	2	4	6	8	10	12	14	16	18	20	22	
2				05C	05C	05C	05D					0.6
3				05C	05C	05C	05D					0.8
4				05C	05C	05C	05D					1.1
5			07D	05C	05C	05C	05D	08E				1.4
6			07D	05C	05C	05C	05D	08E	08F	08F		1.7
7			07D	05C	05C	05D	08D	08E	08F	08F		1.9
8			06C	05C	05C	05D	07G	08E	08F	08F		2.2
9			06C	05C	05C	05D	07G	08E	08F	08F		2.5
10		03G	06C	05C	05D	05D	07G	08E	08F	08F		2.8
14		06C	06C	05D	07F	07F	07G	08E	08F	08F		3.9
17		06C	06C	07E	07F	07F	07G	08E	08F	08F		4.7
20		06C	06C	07F	07F	07G	07G	08F	08F	08F		5.6
23		09C	09D	07F	07F	07G	07G	08F	08F	11G	11G	6.4
26		09C	09D	07F	07G	07G	07G	08F	11F	11G	11G	7.2
29		09C	09D	07F	07G	07G	07G	08F	11F	11G	11G	8.1
32	09C	09C	07F	07F	07G	07G	07G	11F	11F	11G	11G	8.9
35	09C	09D	10D	07G	07G	10F	11E	11F	11F	11G	11G	9.7
38	09C	09D	10D	07G	10F	10F	11E	11F	11F	11G	11G	10.6
41	09C	09D	10D	10E	10F	10F	11E	11F	11F	11G		11.4
44		10D	10D	10E	10F	10F	11F	11F	11G	11G		12.2
47		10D	10D	10E	10F	10F	11F	11F	11G	11G		13.1
50		10D	10E	10F	10F	13F	11F	11F	11G	11G		13.9
53		10D	10E	10F	10F	13F	11F	11G	11G			14.7
56		10E	10E	10F	10F	13F	11G	11G	11G			15.6
59		10E	10E	10F	10F	13F	11G	11G	11G			16.4
62		10F	10F	10F	13F	13F	11G	11G				17.2
65		10F	10F	10F	13F	13F	11G					18.1
68		13D	10F	10F	13F	13F	11G					18.9
71		13D	10F	13E	13F	13F						19.7
74		13D	10F	13E	13F	13F						20.6
77		13D	10F	13E	13F	13F						21.4
80		13D	13D	13E	13F	13F						22.2
83		13D	13D	13E	13F	13F						23.1
86		13D	13D	13E	13F							23.9
89		13D	13E	13E	13F							24.7
92		13D	13E	13F	13F							25.6
95		13D	13E	13F	13F							26.4
98		13D	13E	13F	13F							27.2
101		13D	13E	13F	13F							28.1
104		13D	13E	13F								28.9
107		13D	13E	13F								29.7
110		13D	13E	13F								30.6
113		13E	13E	13F								31.4
116		13E	13E	13F								32.2
119			13F	13F								33.1
122			13F	13F								33.9
125			13F	13F								34.7
130			13F	13F								36.1
	20	39	59	78	98	117	137	157	176	196	215	

### Pressure - kPa

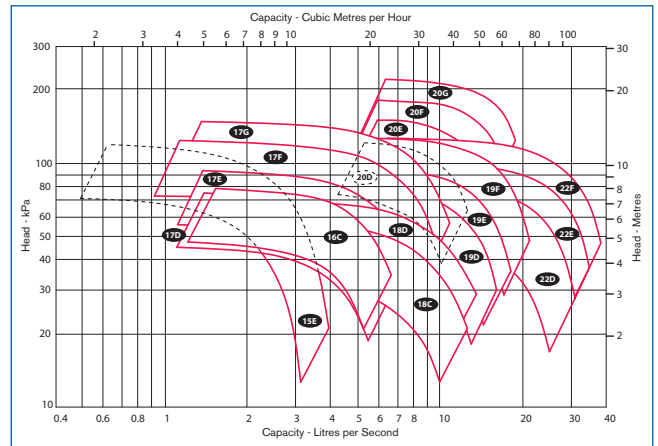
Flow - Cubic Metres per Hour

Flow - Litres per Second

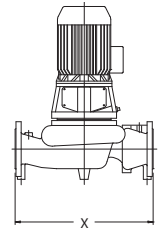
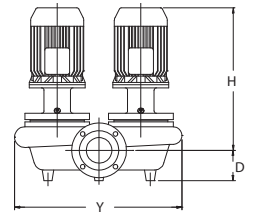
## ► Performance Curve - 4392



## ► Performance Curve - 4392 IVS



Performance Curve	Model	Part Number	Inlet & Outlet	kW	Nominal Speed	Dimensions (mm)					Weight (kg)
						X	Y	D	F	H	
4392	14A	4392 32-105 BF 0.25 1PH	STB032105NAF4102	32mm PN6	0.25	1450 rpm	220	180	75	270	25 kg
	14B	4392 32-105 BF 0.25 3PH	STB032105NAF4302	32mm PN6	0.25	1450 rpm	220	180	75	270	25 kg
	14C	4392 32-105 BF 0.55 1PH	STB032105NAF2104	32mm PN6	0.55	2900 rpm	220	180	75	270	46 kg
	14D	4392 32-105 BF 0.55 3PH	STB032105NAF2304	32mm PN6	0.55	2900 rpm	220	180	75	270	46 kg
	15A	4392 40-120 BF 0.25 1PH	STB040120NAF4102	40mm PN16	0.25	1450 rpm	290	388	80	336	44 kg
	15B	4392 40-120 BF 0.25 3PH	STB040120NAF4302	40mm PN16	0.25	1450 rpm	290	388	80	336	44 kg
	15C	4392 40-120 BF 1.1 1PH	STB040120NAF2106	40mm PN16	1.1	2900 rpm	290	388	80	387	50 kg
	15D	4392 40-120 BF 1.1 3PH	STB040120NAF2306	40mm PN16	1.1	2900 rpm	290	388	80	387	50 kg
	16A	4392 50-150 BF 0.55 3PH	STA050150NAF4304	50mm PN16	0.55	1450 rpm	330	626	173	386	114 kg
	16B	4392 50-150 BF 0.75 3PH	STA050150NAF4305	50mm PN16	0.75	1450 rpm	330	626	173	386	118 kg
	17A	4392 50-200 BF 0.75 3PH	STA050200NAF4305	50mm PN16	0.75	1450 rpm	400	708	168	386	143 kg
	17B	4392 50-200 BF 1.1 3PH	STA050200NAF4306	50mm PN16	1.1	1450 rpm	400	708	168	406	135 kg
	17C	4392 50-200 BF 1.5 3PH	STA050200NAF4307	50mm PN16	1.5	1450 rpm	400	708	168	431	145 kg
	18A	4392 80-150 BF 0.55 3PH	STA080150NAF4304	80mm PN16	0.55	1450 rpm	380	726	188	386	129 kg
	18B	4392 80-150 BF 0.75 3PH	STA080150NAF4305	80mm PN16	0.75	1450 rpm	380	726	188	386	127 kg
	19A	4392 80-200 BF 1.1 3PH	STA080200NAF4306	80mm PN16	1.1	1450 rpm	400	825	196	406	140 kg
	19B	4392 80-200 BF 1.5 3PH	STA080200NAF4307	80mm PN16	1.5	1450 rpm	400	825	196	431	145 kg
	19C	4392 80-200 BF 2.2 3PH	STA080200NAF4308	80mm PN16	2.2	1450 rpm	400	825	196	463	150 kg
	20A	4392 80-250 BF 2.2 3PH	STA080250NAF4308	80mm PN16	2.2	1450 rpm	500	928	195	464	150 kg
	20B	4392 80-250 BF 3.0 3PH	STA080250NAF4309	80mm PN16	3.0	1450 rpm	500	928	195	464	155 kg
	20C	4392 80-250 BF 4.0 3PH	STA080250NAF4310	80mm PN16	4.0	1450 rpm	500	928	195	483	160 kg
	21A	4392 100-150 BF 0.55 3PH	STA100150NAF4304	100mm PN16	0.55	1450 rpm	490	811	216	393	154 kg
21B	4392 100-150 BF 0.75 3PH	STA100150NAF4305	100mm PN16	0.75	1450 rpm	490	811	216	393	155 kg	
21C	4392 100-150 BF 1.1 3PH	STA100150NAF4306	100mm PN16	1.1	1450 rpm	490	811	216	413	159 kg	
22A	4392 100-200 BF 2.2 3PH	STA100200NAF4308	100mm PN16	2.2	1450 rpm	508	961	241	468	182 kg	
22B	4392 100-200 BF 3.0 3PH	STA100200NAF4309	100mm PN16	3.0	1450 rpm	508	961	241	468	182 kg	
22C	4392 100-200 BF 4.0 3PH	STA100200NAF4310	100mm PN16	4.0	1450 rpm	508	961	241	487	182 kg	
4392 IVS	15E	4392S 40-120 BF 0.75 3PH	STB040120NAV4305	40mm PN16	0.75	2900 rpm	290	388	80	386	55 kg
	16C	4392S 50-150 BF 0.55 3PH	STA050150NAV4304	50mm PN16	0.55	1450 rpm	330	626	173	386	118 kg
	17D	4392S 50-200 BF 0.55 3PH	STA050200NAV4304	50mm PN16	0.55	1450 rpm	400	708	168	386	140 kg
	17E	4392S 50-200 BF 0.75 3PH	STA050200NAV4305	50mm PN16	0.75	1450 rpm	400	708	168	386	143 kg
	17F	4392S 50-200 BF 1.1 3PH	STA050200NAV4306	50mm PN16	1.1	1450 rpm	400	708	168	406	135 kg
	17G	4392S 50-200 BF 1.5 3PH	STA050200NAV4307	50mm PN16	1.5	1450 rpm	400	708	168	431	145 kg
	18C	4392S 80-150 BF 0.55 3PH	STA080150NAV4304	80mm PN16	0.55	1450 rpm	380	726	188	386	129 kg
	18D	4392S 80-150 BF 0.75 3PH	STA080150NAV4305	80mm PN16	0.75	1450 rpm	380	726	188	386	131 kg
	19D	4392S 80-200 BF 1.1 3PH	STA080200NAV4306	80mm PN16	1.1	1450 rpm	400	825	196	406	179 kg
	19E	4392S 80-200 BF 1.5 3PH	STA080200NAV4307	80mm PN16	1.5	1450 rpm	400	825	196	431	183 kg
	19F	4392S 80-200 BF 2.2 3PH	STA080200NAV4308	80mm PN16	2.2	1450 rpm	400	825	196	463	191 kg
	20D	4392S 80-250 BF 1.5 3PH	STA080250NAV4307	80mm PN16	1.5	1450 rpm	500	928	195	464	203 kg
	20E	4392S 80-250 BF 2.2 3PH	STA080250NAV4308	80mm PN16	2.2	1450 rpm	500	928	195	464	217 kg
	20F	4392S 80-250 BF 3.0 3PH	STA080250NAV4309	80mm PN16	3.0	1450 rpm	500	928	195	464	205 kg
20G	4392S 80-250 BF 4.0 3PH	STA080250NAV4310	80mm PN16	4.0	1450 rpm	500	928	195	483	221 kg	
22D	4392S 100-200 BF 2.2 3PH	STA100200NAV4308	100mm PN16	2.2	1450 rpm	508	961	241	468	268 kg	
22E	4392S 100-200 BF 3.0 3PH	STA100200NAV4309	100mm PN16	3.0	1450 rpm	508	961	241	468	297 kg	
22F	4392S 100-200 BF 4.0 3PH	STA100200NAV4310	100mm PN16	4.0	1450 rpm	508	961	241	487	297 kg	



Note: All motors are 3-phase, 400v except:  $\Delta$  1-phase, 230v

## ► Selection Chart - 4392

1500 RPM    3000 RPM

### Head - Metres

	2	4	6	8	10	12	14	16	18	20	22	24	
2		14A-B											0.6
3		14A-B	16A	16B	14C-D	14C-D	15C-D	15C-D					0.8
4		15A-B	16A	16B	14C-D	14C-D	15C-D	15C-D					1.1
5		16A	16A	16B	17B	17C	17C	15C-D					1.4
6	14A-B	16A	16A	16B	17B	17C	17C	15C-D					1.7
7	14A-B	16A	16A	16B	17B	17C	17C	15C-D					1.9
8	16A	16A	16A	16B	17B	17C	17C						2.2
9	16A	16A	16A	17A	17B	17C	17C						2.5
10	16A	16A	16A	17A	17B	17C	17C						2.8
14	16A	16A	16A	17B	17B	17C	17C						3.9
17	16A	16A	16B	17B	17B	17C	17C						4.7
20	16A	16A	18B	17B	17C	17C	20A	20B					5.6
23	16A	16B	21C	17B	17C	19C	20A	20B	20C	20C	20C		6.4
26	18A	18A	21C	17C	17C	19C	20A	20B	20C	20C	20C		7.2
29	18A	18A	21C	17C	19C	19C	20A	20B	20C	20C	20C		8.1
32	18A	18B	21C	17C	19C	19C	20A	20B	20C	20C	20C		8.9
35	18A	18B	21C	19B	19C	19C	20A	20B	20C	20C			9.7
38	18A	18B	19A	19B	19C	19C	20B	20B	20C	20C			10.6
41	18A	21B	19A	19B	19C	22C	20B	20B	20C	20C			11.4
44	18A	21B	19B	19C	19C	22C	20B	20C	20C	20C			12.2
47	21A	21C	19B	19C	19C	22C	20B	20C	20C				13.1
50	21A	21C	19B	19C	19C	22C	20C	20C	20C				13.9
53	21A	21C	19C	19C	22C	22C	20C	20C	20C				14.7
56	21A	21C	19C	19C	22C	22C	20C	20C					15.6
59	21B	21C	19C	19C	22C	22C	20C	20C					16.4
62	21B	21C	19C	19C	22C	22C	20C						17.2
65	21B	21C	19C	22B	22C	22C							18.1
68	21B	21C	19C	22B	22C								18.9
71	21C	22A	22A	22B	22C								19.7
74		22A	22A	22B	22C								20.6
77		22A	22A	22B	22C								21.4
80		22A	22A	22B	22C								22.2
83		22A	22B	22B	22C								23.1
86		22A	22B	22C	22C								23.9
89		22A	22B	22C	22C								24.7
92		22A	22B	22C	22C								25.6
95		22A	22B	22C	22C								26.4
98		22A	22B	22C									27.2
101		22B	22B	22C									28.1
104		22B	22B	22C									28.9
107		22B	22B	22C									29.7
110		22B	22B	22C									30.6
113		22B	22C	22C									31.4
116		22B	22C	22C									32.2
119		22C	22C										33.1
122		22C	22C										33.9
125		22C	22C										34.7
	20	39	59	78	98	117	137	157	176	196	215	235	

### Pressure - kPa

Flow - Cubic Metres per Hour

Flow - Litres per Second

# 4392 & 4392 IVS

## ► Selection Chart - 4392 IVS

		Head - Metres											
		2	4	6	8	10	12	14	16	18	20	22	
Flow - Cubic Metres per Hour	4				17E	17F	17F	17G					1.1
	5			16C	17E	17F	17F	17G					1.4
	6			16C	17E	17F	17F	17G					1.7
	7			16C	17E	17F	17F	17G					1.9
	8			16C	17E	17F	17F	17G					2.2
	9		15E	16C	17E	17F	17F	17G					2.5
	10		15E	16C	17E	17F	17F	17G					2.8
	14	15E	16C	16C	17E	17F	17F	17G					3.9
	17		16C	16C	17F	17F	17G	17G					4.7
	20	17D	16C	18D	17F	17F	20D	17G	20F	20F			5.6
	23		18C	18D	17F	17G	20D	20E	20F	20F	20G	20G	6.4
	26		18C	18D	17F	17G	20D	20E	20F	20F	20G	20G	7.2
	29	18C	18C	17F	17G	17G	20D	20E	20F	20F	20G	20G	8.1
	32	18C	18C	17F	17G	19F	20D	20E	20F	20F	20G	20G	8.9
	35	18C	18D	17G	19E	19F	20E	20E	20F	20F	20G	20G	9.7
	38	18C	18D	19D	19E	19F	20E	20E	20F	20F	20G		10.6
	41	18C	18D	19D	19E	19F	20E	20F	20F	20G	20G		11.4
	44	18C	19D	19E	19F	19F	20E	20F	20F	20G	20G		12.2
	47	19D	19D	19E	19F	19F	22F	20F	20F	20G			13.1
	50	19D	19D	19E	19F	19F	22F	20F	20F	20G			13.9
	53		19D	19E	19F	19F	22F	20F	20G	20G			14.7
	56		19D	19E	19F	19F	22F	20F	20G	20G			15.6
	59		19E	19F	19F	22F	22F	20G	20G	20G			16.4
	62		19E	19F	19F	22F	22F	20G	20G				17.2
	65		19E	19F	19F	22F	22F	20G	20G				18.1
68		19F	19F	22E	22F	22F	20G					18.9	
71		19F	19F	22E	22F	22F						19.7	
74		22D	22D	22E	22F	22F						20.6	
77		22D	22D	22E	22F	22F						21.4	
80		22D	22D	22E	22F	22F						22.2	
83	22D	22D	22D	22E	22F							23.1	
86	22D	22D	22E	22E	22F							23.9	
89	22D	22D	22E	22E	22F							24.7	
92	22D	22D	22E	22F	22F							25.6	
95	22D	22D	22E	22F	22F							26.4	
98		22D	22E	22F	22F							27.2	
101		22D	22E	22F								28.1	
104		22E	22E	22F								28.9	
107		22E	22E	22F								29.7	
110		22E	22E	22F								30.6	
113		22E	22F	22F								31.4	
116		22E	22F	22F								32.2	
119		22E	22F									33.1	
122		22E	22F									33.9	
125		22F	22F									34.7	
		20	39	59	78	98	117	137	157	176	196	215	
		Pressure - kPa											

Flow - Litres per Second

## ► Typical Specifications

Pump Type:	Vertical In Line	
Max. Working Pressure 4380:	25-90 and 32-105	5 Bar
	32-120	6 Bar
	All Other Sizes	12 Bar
Max. Working Pressure 4392:	32-105 and 40-120	6 Bar
	All Other Sizes	12 Bar
Max. Working Temp. 4380:	25-90 and 32-105	90°C
	32-120	120°C
	All Other Sizes	107°C
Max. Working Temp. 4392:	32-105 and 40-120	120°C
	All Other Sizes	107°C
End Connections:	DIN PN6 and PN16, BSP Thread	
Primary Seal:	Armstrong Type 1A Mechanical Inside Unbalanced	
Max. Flow:	30 L/s	
Max. Head:	250 kPa	
Motor Enclosure:	TEFV, IP55	
Motor Efficiency:	Standard EFF2	

## ► Materials of Construction

Casing:	BF - Cast Iron BS1452 Grade 260
	AB - Cast Iron BS1400 LG2C
Impeller:	Cast Bronze BS1400 LG2C
Casing Gasket:	Fiber
Adaptor Bracket:	BF - Cast Iron BS1452 Grade 260
	AB - Cast Iron BS1400 LG2C
Motor Shaft:	Carbon Steel
Stub Shaft:	Stainless Steel BS970 431.S29
Shaft Spacer:	Stainless Steel BS970 431.S29
Water Slinger:	Neoprene
Rotating Seal Face:	Carbon
Stationary Seal Face:	Silicon Carbide
Secondary Seal:	EPDM

Our policy is one of continuous improvement and we reserve the right to alter our dimensions and specifications without notice

EXPERIENCE BUILDING...

**Armstrong Integrated Limited**  
Wenlock Way  
Manchester  
United Kingdom, M12 5JL  
T: +44 (0) 8444 145 145  
F: +44 (0) 8444 145 146

**S. A. Armstrong Limited**  
23 Bertrand Avenue  
Toronto, Ontario  
Canada, M1L 2P3  
T: 001 416 755 2291  
F: 001 416 759 9101

