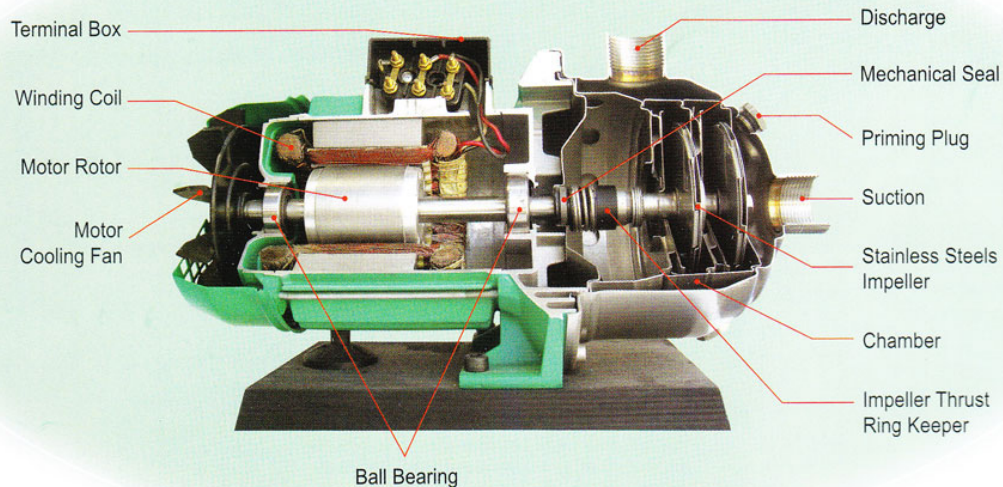


Pressure Boosting

Pumps for Mechanical Building And Industrial Services



MHI Series



Wilco-Economy MHI - Series 2../4../8../16..



Wilco-Economy MHI

Non self-priming pumps

Identification Code

E.g.: Wilo MHI 405

MHI Multistage not self-priming Horizontal centrifugal pump with common motor/pump shaft. All parts in contact with the pumped fluid are of Inox (stainless steel)

4 Rated flow Q [m³/h] (2-pole/50 Hz)

05 No. of stages

Application

Water supply and pressure boost-ing, universally applicable pump for trade and industry, cooling water circuits, pressure cleaning and sprinkler systems.

Technical Data

Approved fluids

Potable water
Heating water
Domestic hot and cold water
Condensate
Water-Glycol-mixtures ¹⁾
Other low-viscosity fluids ²⁾

Performance	MHI 2	MHI 4	MHI 8	MHI 16	50 Hz operation
Max. flowrate [m ³ /h]	5	8	12	25	
Max. head [m]	70	68	60	47	
Rated speed [rpm]	2950				
Fluid temperature [°C]	-15 + 110				
Ambient temperature [°C]	max. + 40				
Working pressure [bar]	max. 10				
Inlet pressure ³⁾ [bar]	max. 6				

Motor data

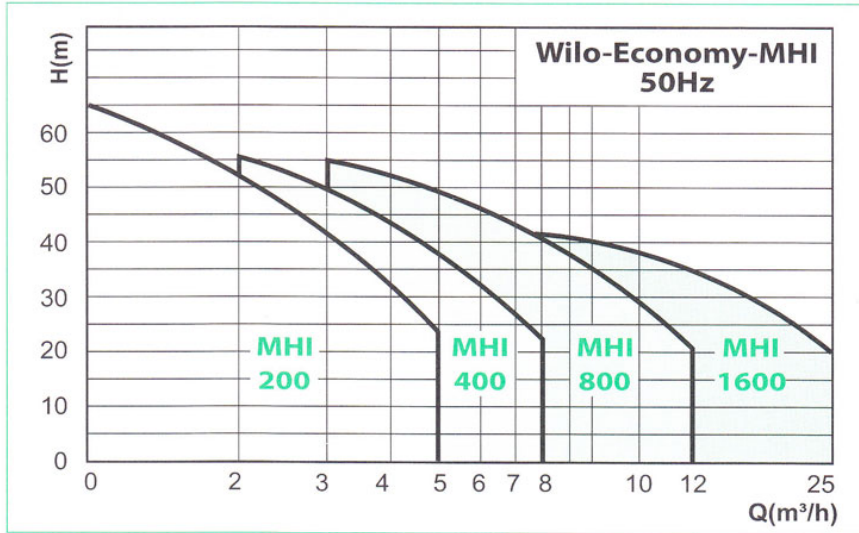
Degree of protection	IP 54
Insulation class	F

Mains power

3 ~ 230 VΔ and 400 VY/50 Hz
1 ~ 230 V/50 Hz
Perm. voltage tolerance ± 10%

Construction materials

Impellers	S.S. 304 / 316
Diffusers	S.S. 304 / 316
Pump casing	S.S. 304 / 316
Shaft	S.S. 304 / 316
Seal	EP 851 Viton
Casing cover	S.S. 304 / 316
Mech. seal	Carbon/wolfram carbide



Design

Multistage not self priming horizontal high pressure centrifugal pump of Monobloc end-suction, vertical discharge design, PN 10.

Stage construction with stainless steel impellers, diffusers and casing. Extended common motor/pump shaft. Maintenance-free bi-directional mechanical seal. All relevant parts suitable to handle food-compatible media. Pump casing complete with fill and drain plugs.

Motor

TEFC three phase flange mounted motor with extended shaft. Single phase motors with integrated overload protection.

Options

Hydraulic parts in Grade 316 L stainless steel (BS 970); 60 Hz; non-standard voltages.

Scope of Supply

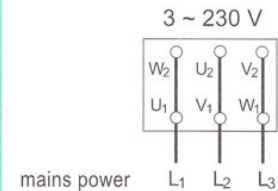
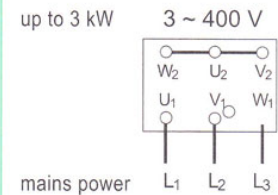
Pump, complete with packing and O&M manual.

Code:

- ¹⁾ Up to 40% glycol content, 10% and above requires hydraulic data corrections.
- ²⁾ Without abrasive or fibrous matter so long as they are non-aggressive to the given pump materials.
- ³⁾ Max. inlet pressure: Max, system pressure less shut-off head.

Wiring Diagram

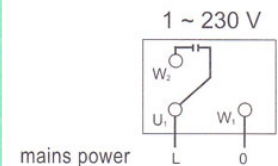
Mains power: Three phase



To change direction of rotation: Change any two phase wires.

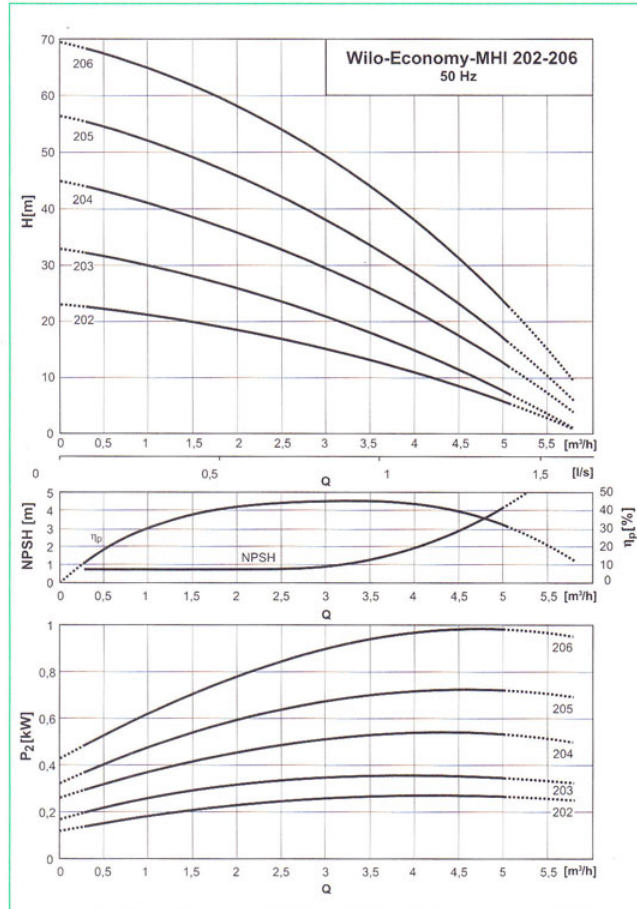
Onsite overload protection by others

Mains power: Single phase

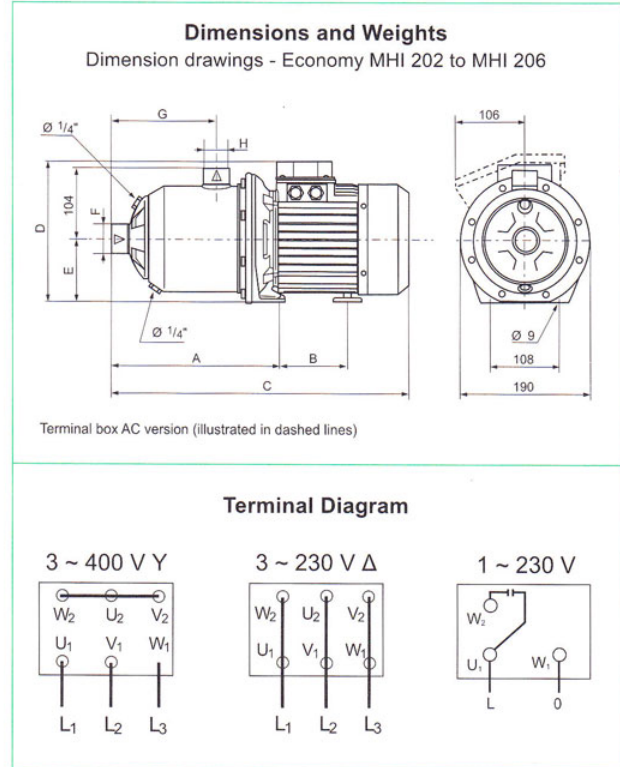


High Pressure Multistage Centrifugal Pumps (Single Head Pumps)

1.3.1 Pump Curves Wilo Economy MHI 2 Series



1.3.1a Dimensions, Weights and Terminal Diagram Wilo Economy MHI 2 Series



1.3.1b Motor Data Wilo Economy MHI 2 Series

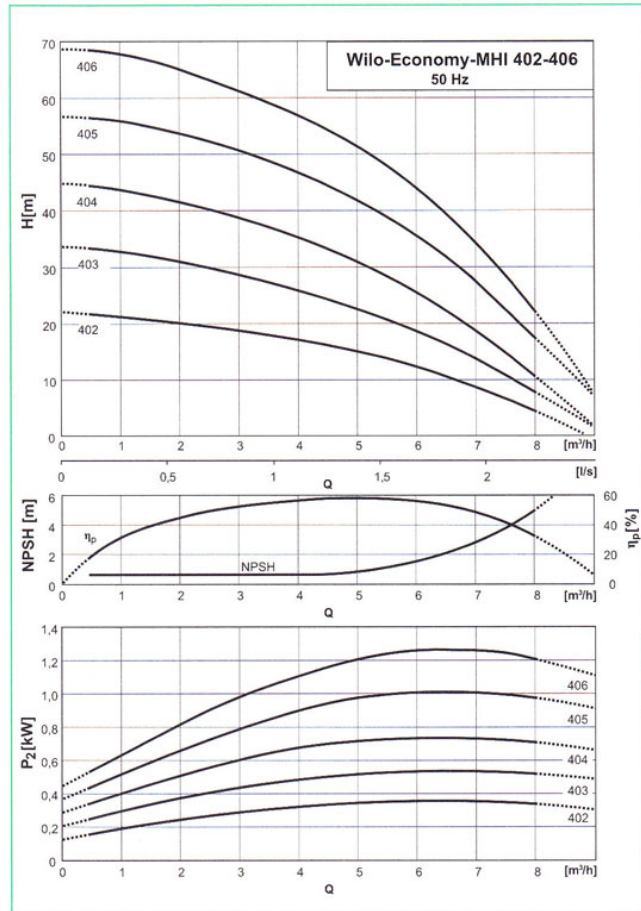
Wilo-Economy	Nominal power P_2	Nominal current I_N		
	[kW]	1 ~ 230 V	3 ~ 230 V	3 ~ 400 V
MHI 202	0.55	4.0	3.0	1.7
MHI 203	0.55	4.0	3.0	1.7
MHI 204	0.55	4.0	3.0	1.7
MHI 205	0.75	5.1	3.6	2.1
MHI 206	1.1	7.2	5.3	3.1

1.3.1c Dimensions, Weights Wilo Economy MHI 2 Series

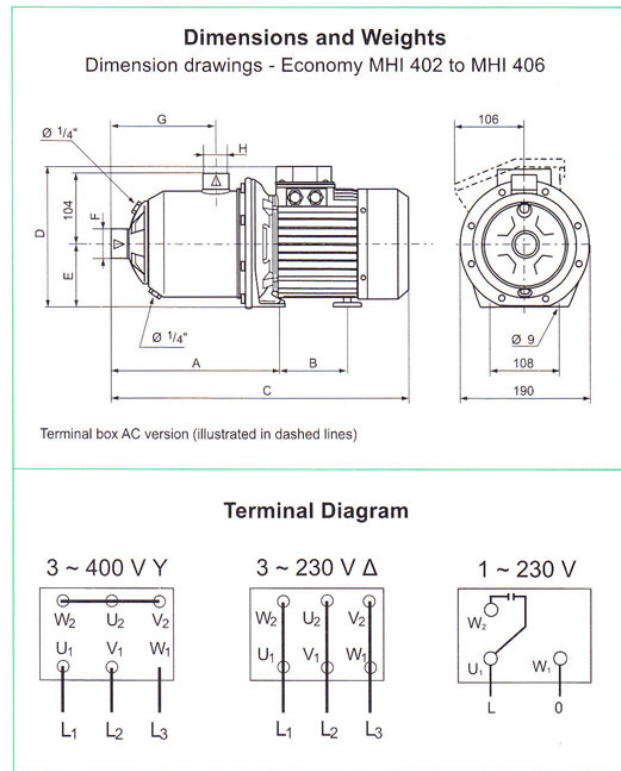
Wilo-Economy...	Dimensions												Weight	
	A	B		C		D		E		F	G	H		
		1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V				1~ 230 V	3~ 400 V
	[mm]											[kg]		
MHI 202	204	95	95	375	375	216	192	90	90	Rp 1	110	Rp 1	9.8	8.9
MHI 203	204	95	95	375	375	216	192	90	90	Rp 1	110	Rp 1	9.8	8.9
MHI 204	252	95	95	423	423	216	192	90	90	Rp 1	158	Rp 1	10.6	9.7
MHI 205	252	95	95	423	423	216	192	90	90	Rp 1	158	Rp 1	12.2	11.3
MHI 206	276	103.5	95	472	447	224	192	90	90	Rp 1	182	Rp 1	15.7	12.9

High Pressure Multistage Centrifugal Pumps (Single Head Pumps)

1.3.2 Pump Curves Wilo Economy MHI 4 Series



1.3.2a Dimensions, Weights and Terminal Diagram Wilo Economy MHI 4 Series



1.3.2b Motor Data Wilo Economy MHI 4 Series

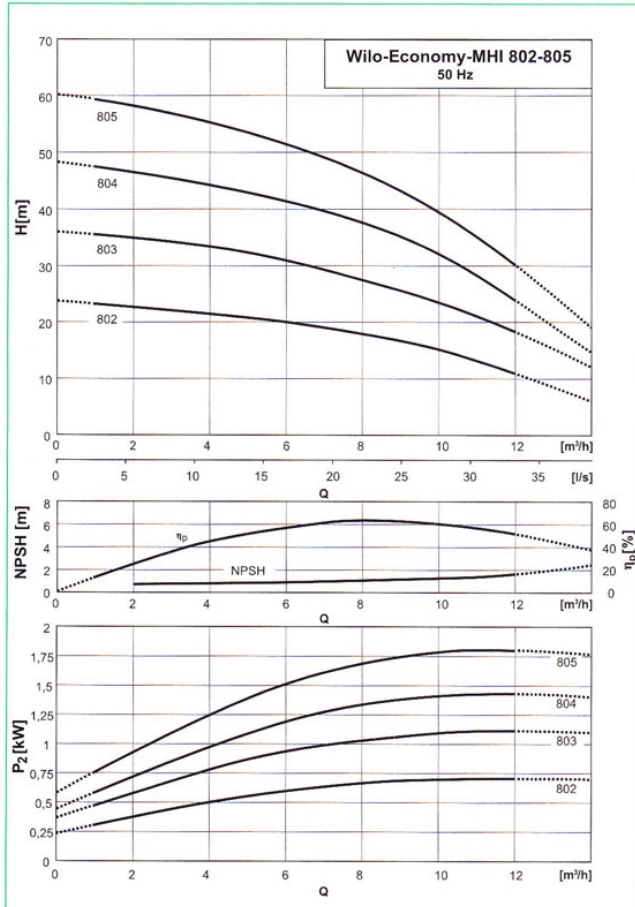
Wilo-Economy	Nominal power P ₂ [kW]	Nominal current I _N		
		1 ~ 230 V	3 ~ 230 V	3 ~ 400 V
MHI 402	0.55	4.0	3.0	1.7
MHI 403	0.55	4.0	3.0	1.7
MHI 404	0.75	5.1	3.6	2.1
MHI 405	1.1	7.2	5.3	3.1
MHI 406	1.5	9.2	6.6	3.8

1.3.2c Dimensions, Weights Wilo Economy MHI 4 Series

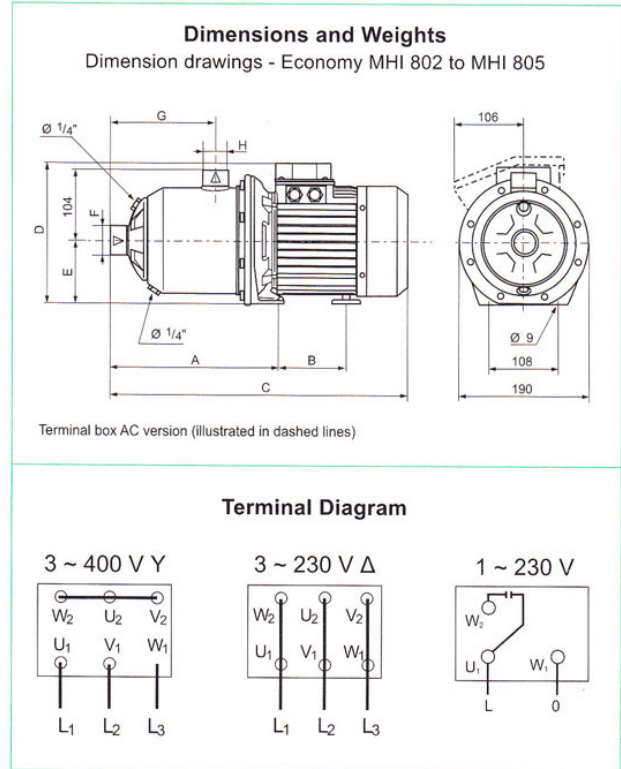
Wilo-Economy...	Dimensions											Weight		
	A	B		C		D		E		F	G	H		
		1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V				1~ 230 V	3~ 400 V
	[mm]											[kg]		
MHI 402	204	95	95	375	375	216	192	90	90	Rp 1 1/4	110	Rp 1	9.8	8.9
MHI 403	204	95	95	375	375	216	192	90	90	Rp 1 1/4	110	Rp 1	9.8	8.9
MHI 404	252	95	95	423	423	216	192	90	90	Rp 1 1/4	158	Rp 1	12.2	11.3
MHI 405	252	103.5	95	448	423	224	192	90	90	Rp 1 1/4	158	Rp 1	15.2	12.9
MHI 406	276	103.5	103.5	472	472	224	206	90	90	Rp 1 1/4	182	Rp 1	16.7	15.2

High Pressure Multistage Centrifugal Pumps (Single Head Pumps)

1.3.3 Pump Curves Wilo Economy MHI 8 Series



1.3.3a Dimensions, Weights and Terminal Diagram Wilo Economy MHI 8 Series



1.3.3b Motor Data Wilo Economy MHI 8 Series

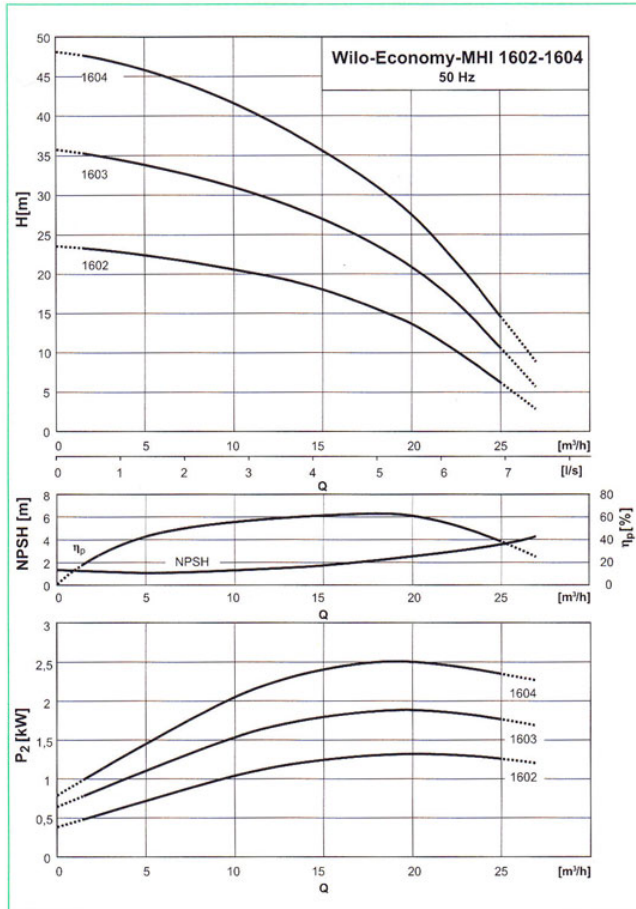
Wilo-Economy	Nominal power P ₂	Nominal current I _N		
	[kW]	1 ~ 230 V	3 ~ 230 V	3 ~ 400 V
MHI 802	0.75	5.1	3.6	2.1
MHI 803	1.1	7.2	5.3	3.1
MHI 804	1.5	9.2	6.6	3.8
MHI 805	1.85	-	8.55	4.95

1.3.3c Dimensions, Weights Wilo Economy MHI 8 Series

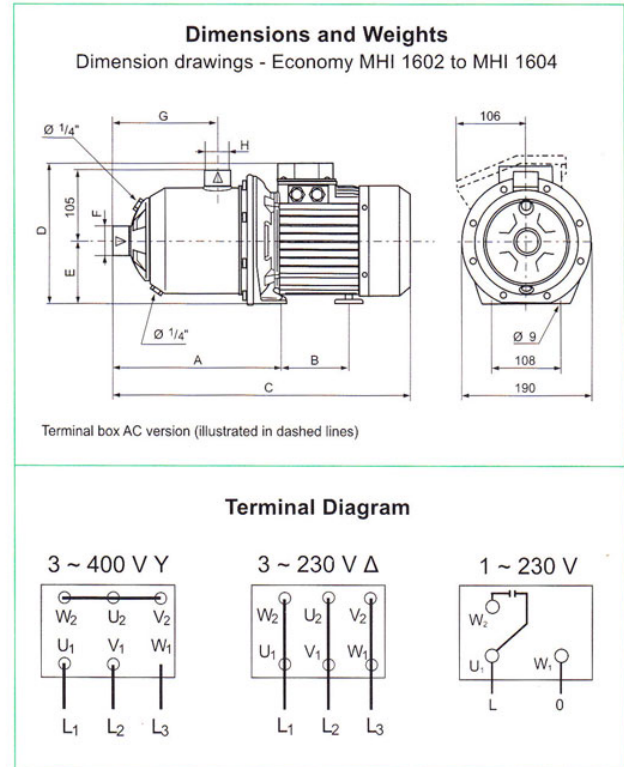
Wilo-Economy...	Dimensions											Weight		
	A	B		C		D		E		F	G	H		
		1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V				1~ 230 V	3~ 400 V
		[mm]										[mm]		[kg]
MHI 802	216	95	95	387	387	216	192	90	90	Rp 1 1/2	122	Rp 1 1/4	11.5	10.6
MHI 803	216	104	95	412	387	224	192	90	90	Rp 1 1/2	122	Rp 1 1/4	14.5	12.2
MHI 804	276	104	104	472	472	224	206	90	90	Rp 1 1/2	182	Rp 1 1/4	16	15.8
MHI 805	276	-	104	-	472	-	206	-	90	Rp 1 1/2	182	Rp 1 1/4	-	17

High Pressure Multistage Centrifugal Pumps (Single Head Pumps)

1.3.4 Pump Curves Wilo Economy MHI 16 Series



1.3.4a Dimensions, Weights and Terminal Diagram Wilo Economy MHI 16 Series



1.3.4b Motor Data Wilo Economy MHI 16 Series

Wilo-Economy	Nominal power P_2 [kW]	Nominal current I_n [A]		
		1 ~ 230 V	3 ~ 230 V	3 ~ 400 V
MHI 1602	1.5	-	6.6	3.8
MHI 1603	1.85	-	8.55	4.95
MHI 1604	2.5	-	10.1	5.85

1.3.4c Dimensions, Weights Wilo Economy MHI 16 Series

Wilo-Economy...	Dimensions									Weight				
	A	B		C		D		E	F	G	H			
		1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V	1~ 230 V	3~ 400 V			1~ 230 V	3~ 400 V	
		[mm]										[kg]		
MHI 1602	236	-	103.5	-	432	-	206	-	90	Rp 2	138	Rp 1 1/2	-	15.5
MHI 1603	236	-	103.5	-	432	-	206	-	90	Rp 2	138	Rp 1 1/2	-	17.7
MHI 1604	281	-	136.5	-	516	-	221	-	100	Rp 2	183	Rp 1 1/2	-	21.1