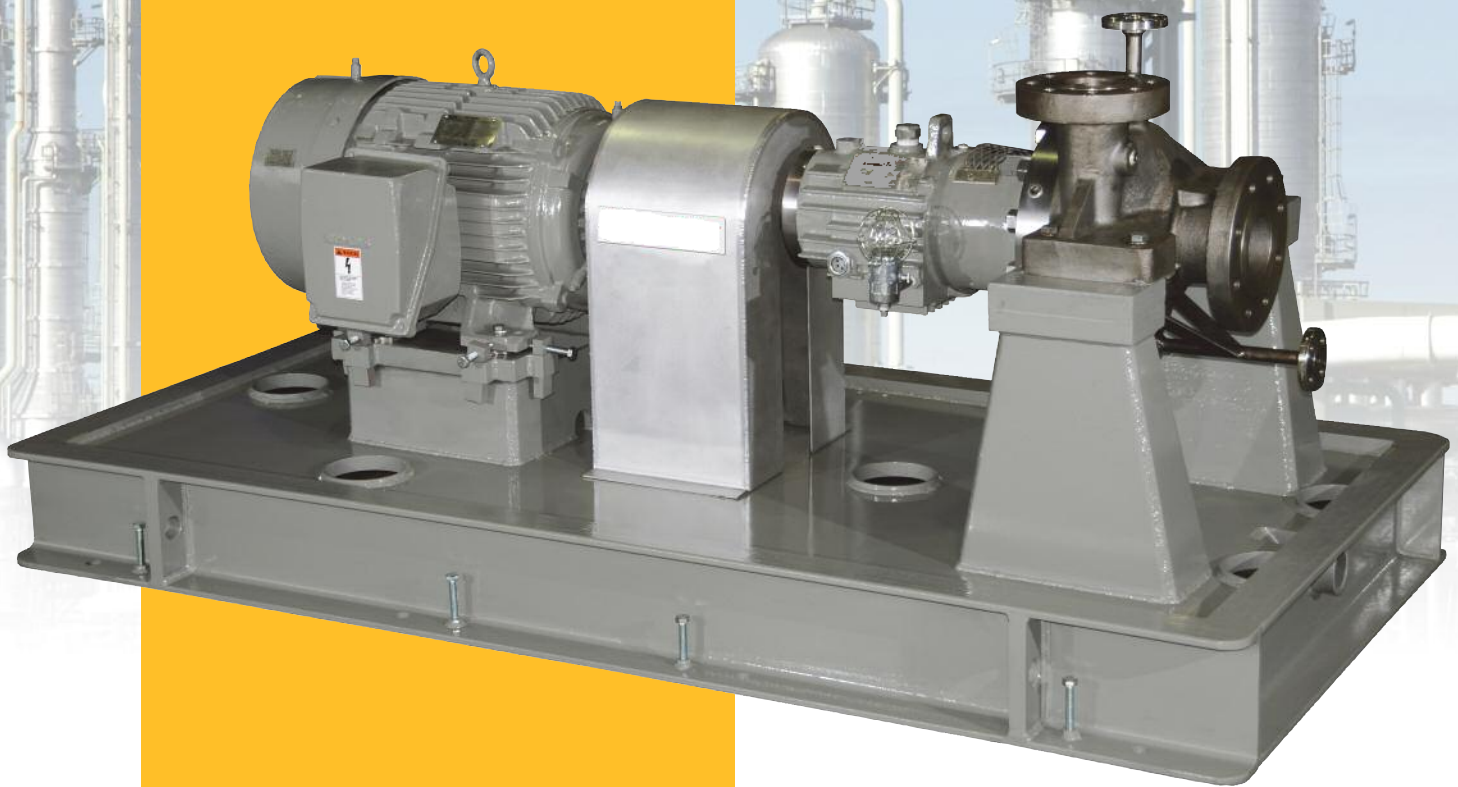


# OH2P

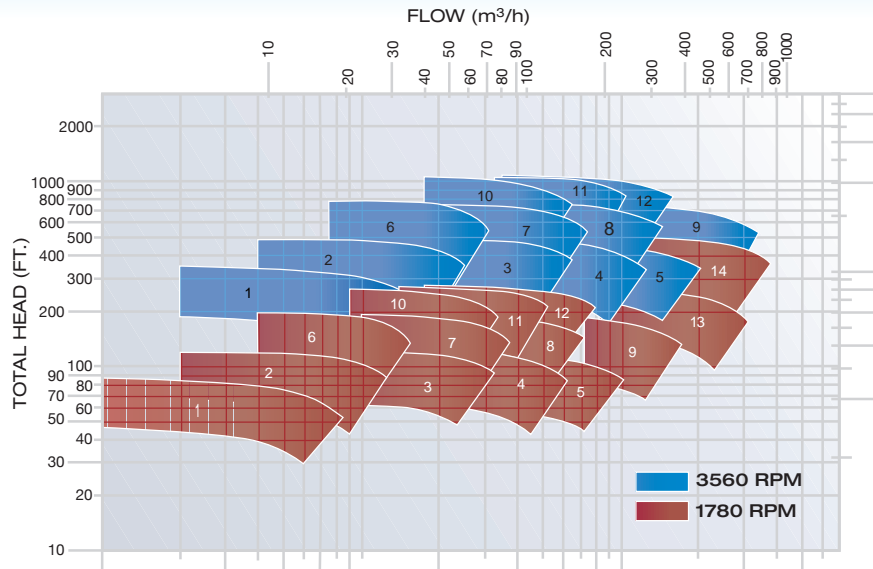
**API 610  
SINGLE STAGE OH2**



## HYDRAULIC PERFORMANCE COVERAGE

### Hz 60 Performance Coverage

Visit our web site at [www.petrorahanpump.ir](http://www.petrorahanpump.ir) and specify flow and performance needs and obtain pump selection, performance curve, drawing, and data sheet

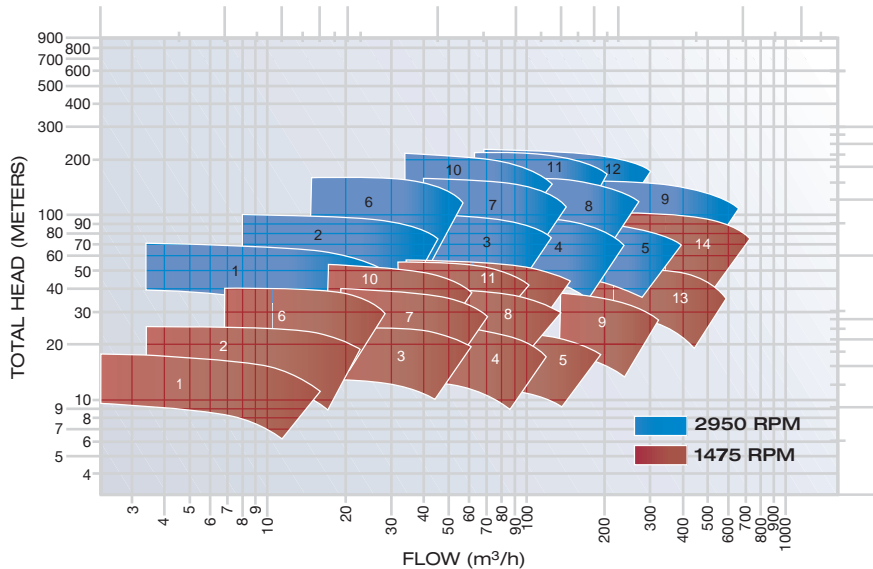


Performances shown are normal and are to be used for preliminary selection only.

### Hz 50 Performance Coverage



Visit our web site at [www.petrorahanpump.ir](http://www.petrorahanpump.ir) and specify flow and performance needs and obtain pump selection, performance curve, drawing, and data sheet



## STANDARD MATERIALS OF CONSTRUCTION

API MATERIAL CLASS	S-6	S-8	C-6	A-8
CASING	A216 GRADE WCB	A216 GRADE WCB	A487 GRADE CA6NM	A351 GRADE CF3M
COVER	A516 GRADE 70	A516 GRADE 70	A479 TYPE 410SS	A479 TYPE 316/316L
IMPELLER	A487 GRADE CA6NM	A351 CF8M 316SS	A487 GRADE CA6NM	A351 CF8M 316SS
SHAFT	A276 TYPE 410SS CONDITION "T"	A479 TYPE 316 / 316L	A276 TYPE 410SS CONDITION "T"	A479 TYPE 316 / 316L
IMPELLER LOCK NUT	A479 TYPE 316L	A479 TYPE 316L	A479 TYPE 316L	A479 TYPE 316L
BEARING HOUSING	A216 GRADE WCB CARBON STEEL	A216 GRADE WCB CARBON STEEL	A216 GRADE WCB CARBON STEEL	A216 GRADE WCB CARBON STEEL
IMPELLER WEAR RINGS	420 SS HT: 400-450 BHN	316 SS HARD FACED	420 SS HT: 400-450 BHN	316 SS HARD FACED
CASING WEAR RINGS	410 SS HT: 262-302 BHN	316 SS HARD FACED	410 SS HT: 262-302 BHN	316 SS HARD FACED
THROAT BUSHING	410 SS HT: 262-302 BHN	316 SS HARD FACED	410 SS HT: 262-302 BHN	316 SS HARD FACED
CASING STUDS	A193 GRADE B-7	A193 GRADE B-7	A193 GRADE B-7	A193 GRADE B-7
CASING NUTS	A194 GRADE 2H	A194 GRADE 2H	A194 GRADE 2H	A194 GRADE 2H

\*Other API 610 Material Classes and Combinations are available

# OH2P API 610 PROCESS PUMP

## DESIGN FEATURES AND BENEFITS

### Quality

- Manufactured and tested in the USA

### Dual Volute Casing

- On larger pump sizes
- Minimizes radial loads and shaft deflection increasing mechanical seal and bearing life

### Discharge Nozzle

- Tangential discharge maximizes hydraulic efficiency

### Drain & Vent Ports

- Threaded or socket welded
- Socket welded drain port two-plane gusseted and piped to skid edge 3/4" SCH 160 300# RF

### Casing Mounting Feet

- Gusseted to meet stringent API nozzle loading criteria

### Nozzle Load

- Casing & baseplate design exceeds current edition API 610 nozzle load requirement

### Impeller Retention

- Keyed and secured to shaft with exclusive dual set-screw locknut

### Pump Casing

- Precision machining and fully confined controlled compression gasket ensures proper sealing and case to cover alignment

### Impeller

- Fully enclosed design provides increased efficiency
- Dynamically balanced to API 610 criteria

### Delivery

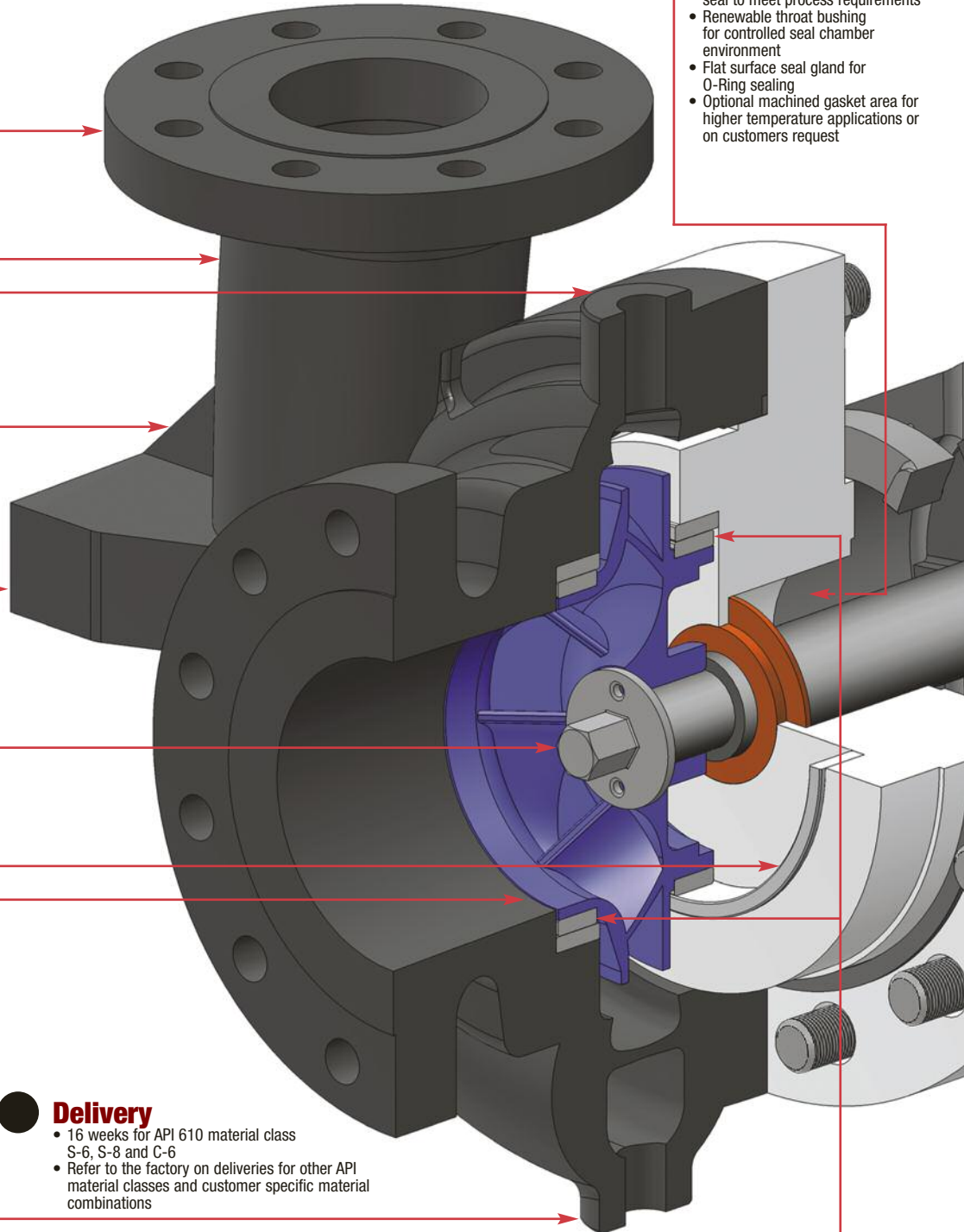
- 16 weeks for API 610 material class S-6, S-8 and C-6
- Refer to the factory on deliveries for other API material classes and customer specific material combinations

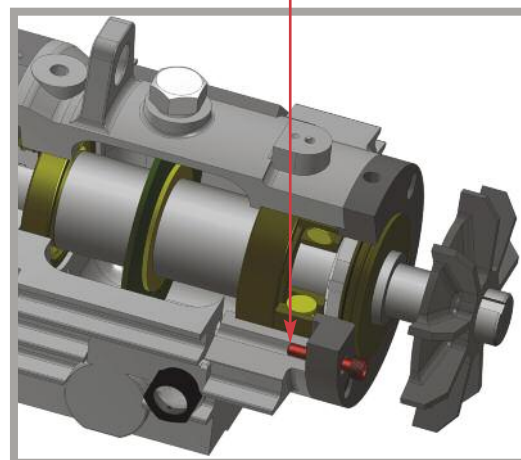
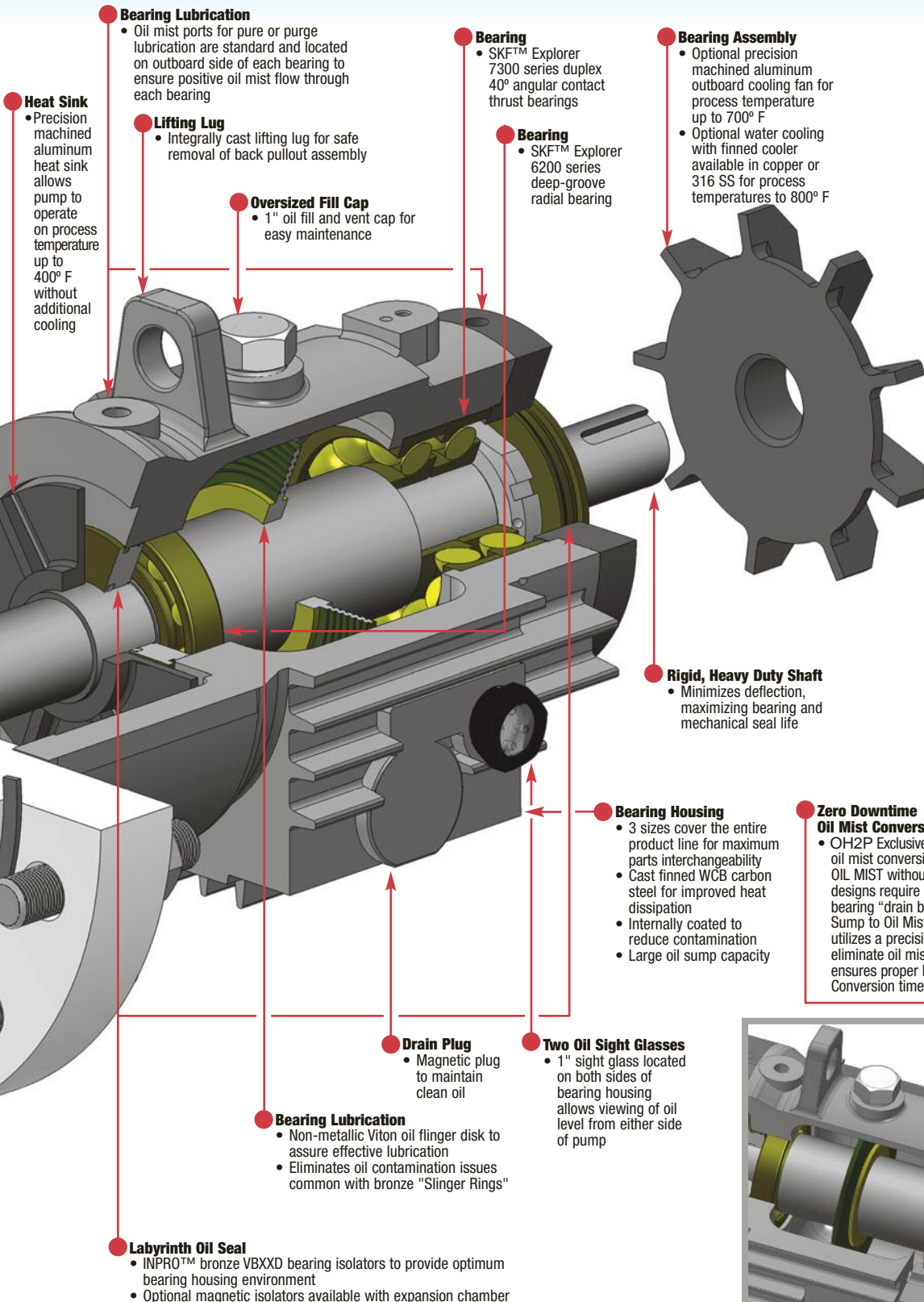
### Casing Cover and Seal Chamber

- API 610 seal chamber allows user to install any API 682 cartridge seal to meet process requirements
- Renewable throat bushing for controlled seal chamber environment
- Flat surface seal gland for O-Ring sealing
- Optional machined gasket area for higher temperature applications or on customers request

### Renewable Casing and Impeller Wear Rings

- Front and back rings control seal chamber pressure and provides impeller stability
- Optional non-metallic rings for improved efficiency and dry running

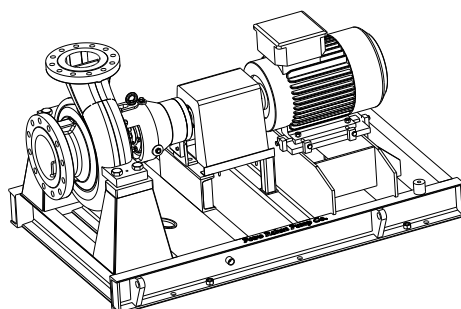
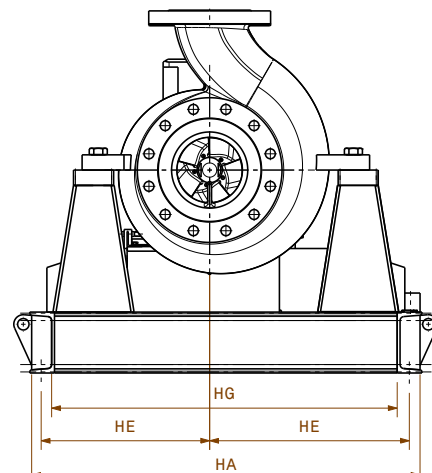
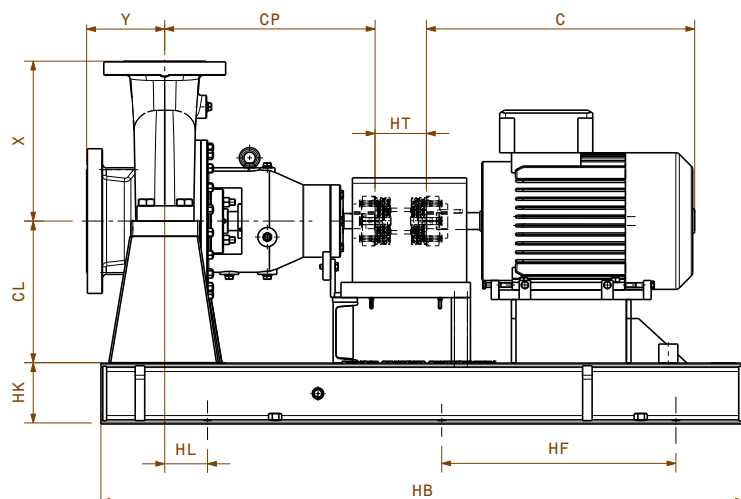






## OH2P API 610 PROCESS PUMP

### OUTLINE DIMENSIONS



### PUMP AND DRIVER DIMENSIONS

PUMP SIZE	CURVE NO.	CP	CL	HL	HT	X	Y	SUCTION	DISCHARGE	PUMP WEIGHT-KG	BASE #
40-80-230	1	633	321	127	127	216	168	3"	1.5"	220	3
40-80-260	2	633	356	152	127	267	175	3"	1.5"	273	3
80-110-260	3	651	387	152	178	256	270	4"	3"	286	5
110-160-260	4	651	368	152	178	267	236	6"	4"	296	5.5A
160-160-260	5	653	368	203	178	279	174	6"	6"	296	6
40-80-330	6	702	292	152	127	298	197	3"	1.5"	286	5
40-110-330	7	699	406	165	178	332	190	4"	3"	309	5.5B
110-160-330	8	702	457	216	178	356	341	6"	4"	318	6.5
160-210-330	9	722	508	203	203	383	227	8"	6"	341	7A
50-110-390	10	716	317	178	178	330	203	4"	2"	318	6
80-160-390	11	716	406	184	178	316	207	6"	3"	364	6.5
110-160-390	12	722	406	178	178	400	178	6"	4"	386	7A
210-260-390	13	725	559	241	178	408	257	10"	8"	500	6.5
210-260-540	14	772	610	354	178	483	254	10"	8"	818	7A

### BASEPLATE DIMENSIONS

BASE #	HA	HB	HK	HE	HF	HG	WEIGHT-KG
3	914	1842	152	419	768	762	409
5	1067	1842	152	495	768	914	455
6	1067	2451	152	495	715	914	545
6.5	1067	2756	152	495	613	914	636
5.5A	1067	2146	152	495	614	914	500
5.5B	1067	2146	152	495	614	914	523
7A	1550	3150	152	737	947	1397	944

### NOTES

1. DIMENSIONS ARE IN MM
2. DIMENSIONS OF PUMP ARE  $\pm 3$  MM UNLESS OTHERWISE NOTED
3. DIMENSIONAL TOLERANCES OF MOTOR ARE IN COMPLIANCE WITH NEMA MG-1
4. PUMP FLANGE RATINGS ARE ANSI B16.5 300# RF
5. CCW ROTATION VIEWED FROM COUPLING END
6. BASEPLATE DIMENSIONS NOT TO BE USED FOR CONSTRUCTION

## TECHNICAL DATA

PUMP SIZE		40-80-230	40-80-260	80-110-260	110-160-260	160-160-260	40-80-330	40-110-330	110-160-330	160-210-330	50-110-390	80-160-390	110-160-390	210-260-390	210-260-540	
FLANGE	SUCTION - 300# RF [IN]	3	3	4	6	6	3	4	6	8	4	6	6	10	10	
	DISCHARGE - 300# RF [IN]	1.5	1.5	3	4	6	1.5	3	4	6	2	3	4	8	8	
MAWP	S-6 [bar 60 DEG °C]	50														
	S-8 [bar 60 DEG °C]															
	C-6 [bar 60 DEG °C]															
	A-8 [bar 60 DEG °C]															
	Mechanical Group	IA	IB				IIA				IIB				IIIA	
	Bearing Frame	I			I	I	II				II				III	
	Volute Type	SINGLE			DOUBLE			SINGLE		DOUBLE		SINGLE	DOUBLE			
AUX PORTS	Discharge (Flush) [IN]	1/2														
	Vent [IN]	1/2			3/4						1/2	3/4				
	Drain [IN]															
	Suction [IN]	1/2														
SHAFT	Max Impeller [mm]	229	267	267	267	267	338	338	338	338	394	394	394	394	533	
	Min Impeller [mm]	178	203	203	203	203	254	254	254	254	305	305	305	305	381	
	Diameter at Coupling [mm]	41					48			60	48	60			64	
	Keyway at Coupling [mm]	10					13			13						19
	Extension at Coupling [mm]	89					89						114			
	Diameter at Mechanical Seal [mm]	51					70						85			
	Diameter Between Bearings [mm]	76					89						108			
	Distance Between Bearings [mm]	197					224						245			
	Radial Bearing	6212					6215						6218			
	Thrust Bearing	7312 X 2					7314 X 2						7317 X 2			
	Maximum RPM	7312 X 2					3600						1780			
Maximum HP/100 RPM	8.0					12.5			12.5						21.5	

### Typical Applications

OH2P pump is designed for covering the full range of petroleum refinery services, petrochemical plants, gas processing, oil processing, offshore installations (platforms), hydrocarbon and crude oil pipeline, and aviation (jet) fueling.

### Typical Services

Services covered but not limited by the OH2P pump include:

- Column reflux
- Scrubber circulation
- Column bottoms
- Tower bottoms
- Reboiler
- Off-site hydrocarbon
- Injection fuel blending
- Stripper overhead
- Heat transfer
- Gasoline
- Gas oil
- Water
- Heavy gas oil
- Propanes
- Hot oil
- Crude oil
- Column charge
- Vis-breaker
- Reactor feed
- Naphtha
- Coker unit
- Kerosene
- Stabilizer overhead



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تجهیزات تخصصی پمپ

ساخت شاسی استاندارد API

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PETRO RAHAN PUMP Test Facility located in Tehran Iran provides performance and NPSHR test in accordance with latest edition of API 610 for horizontal and vertical pumps.

See our Test Facility Brochure for more information.