Italgroup®

HYDRAULIC MOTORS

ITALY

IAM

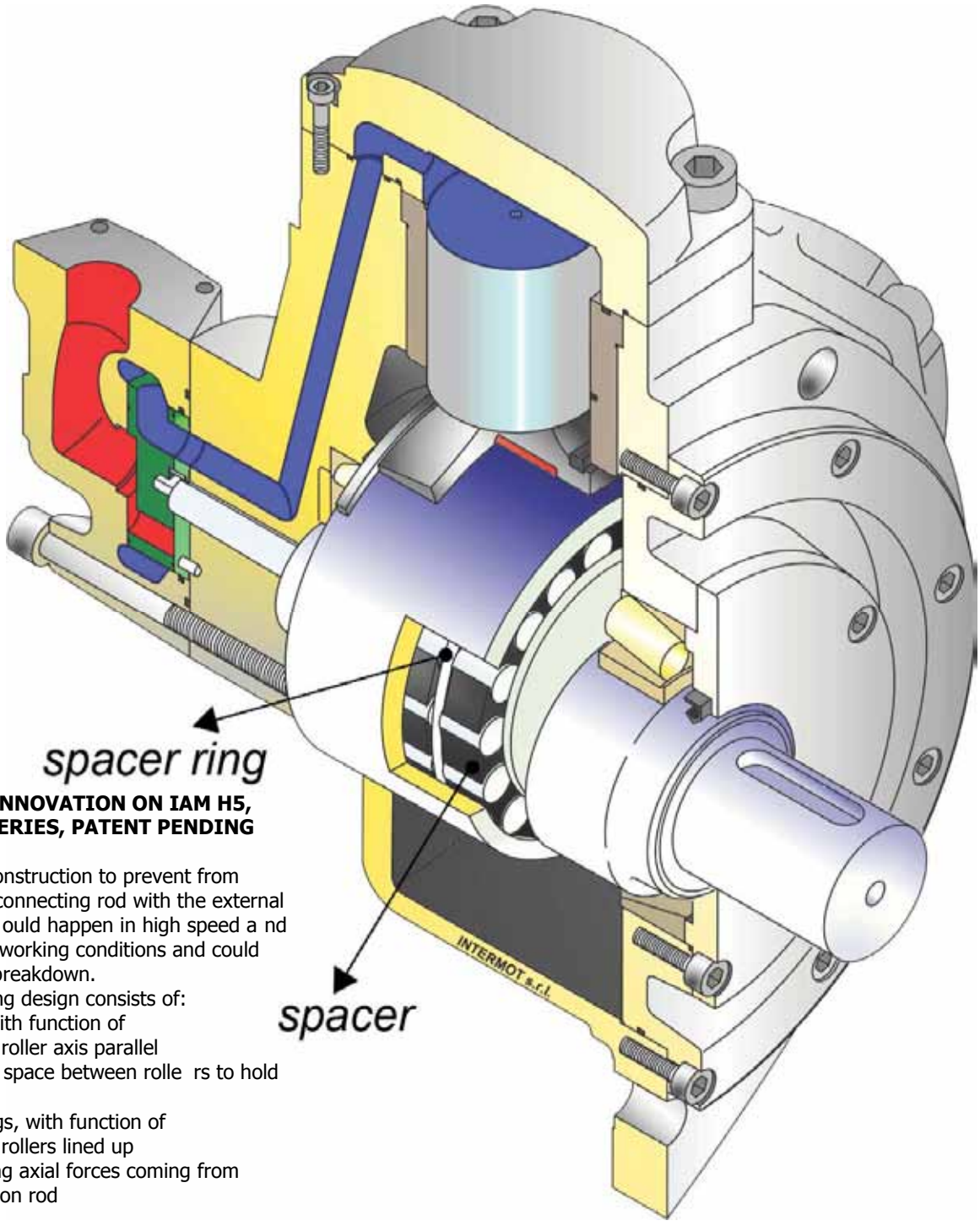
Italgroup®
HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
TECHNICAL CATALOGUE

INDEX

GENERAL INFORMATION

ITALGROUP produces RADIAL PISTON HYDRAULIC MOTORS since 1985: our yearly production is more than 13.000 units which we sell all over the world through our agents and authorized sellers. Our motor range varies from 20cc to 8500cc displacement and it is completed by two-speed motors and special motors created in cooperation with our clients for different applications such as : underwater, high & low speed and wheel motors and with the possibility to assemble valves, brakes or gear reductions. You can directly contact our Technical Department which will give you all the necessary support to find the right solutions to your problems.
ITALGROUP is a flexible work reality and manages deliveries also within the same day of order; we produce motors exactly interchangeable with our competitors, always ready on stock which our clients particularly appreciate.

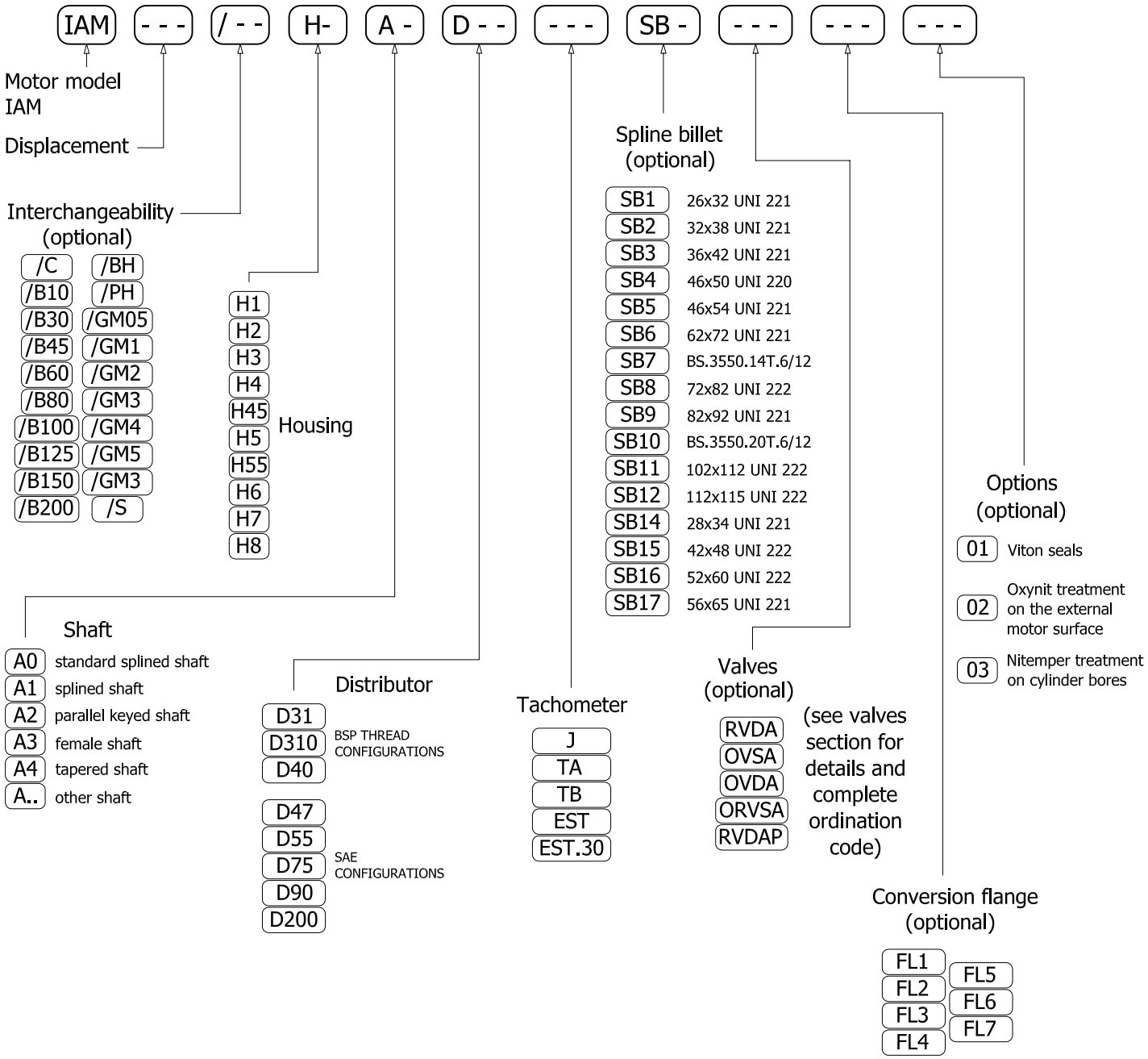


TECHNICAL INNOVATION ON IAM H5, H6 AND H7 SERIES, PATENT PENDING

New bearing construction to prevent from seizure of the connecting rod with the external bushing. This could happen in high speed and high pressure working conditions and could lead to motor breakdown.
The new bearing design consists of:

- spacers, with function of
  - keeping roller axis parallel
  - creating space between rollers to hold more oil
- spacer rings, with function of
  - keeping rollers lined up
  - absorbing axial forces coming from connection rod

ORDERING INSTRUCTIONS



EXAMPLE:
IAM.100/BH.H1.A0.D40.J.SB14
IAM.3000.H6.A2.D90
IAM.4300/C.H7.A0.D90.TB

For more details on available displacements or shaft options and accessories consult each section of the catalogue concerning IAM family products and accessories.

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MOTOR TECHNICAL DATA

MODEL		N° of pistons	Displacement	Specific Torque	Pressure			Speed		Max Case Pressure	Max Power		Dry Weight	Inertia moment of rotating parts
					Max Cont.	Max Int.	Peak	Max Continuous	Peak					
			cc/rev	Nm/bar	bar	bar	bar	rpm	rpm	bar	hp	kW	kg	kg cm^2
IAM 80	H1	5	80	1.3	250	300	350	950	1050	6	54	40	26	18
IAM 100		5	100	1.6	250	300	350	950	1050	6	54	40	26	18
IAM 150		5	157	2.5	250	300	350	950	1050	6	54	40	26	18
IAM 175		5	176	2.8	250	300	350	800	900	6	54	40	26	18
IAM 195		5	195	3.1	250	300	350	800	900	6	54	40	26	18
IAM 200		5	207	3.3	250	300	350	750	850	6	54	40	26	18
IAM 250		5	257	4.1	250	300	350	750	850	6	54	40	26	18
IAM 300		5	307	4.9	250	300	350	750	850	6	54	40	26	18
IAM 200	H2	5	198	3.2	250	300	350	800	900	6	66	49	42	27
IAM 250		5	253	4.0	250	300	350	750	850	6	66	49	42	27
IAM 300		5	314	5.0	250	300	350	750	850	6	66	49	42	27
IAM 350		5	362	5.8	250	300	350	650	750	6	66	49	42	27
IAM 400		5	424	6.7	250	300	350	600	700	6	66	49	42	27
IAM 500		5	492	7.8	250	300	350	500	600	6	66	49	42	27
IAM 600		5	584	9.3	250	300	350	500	600	6	66	49	42	27
IAM 350	H3	5	349	5,6	250	300	350	630	700	6	91	68	68	214
IAM 400		5	397	6.3	250	300	350	600	680	6	91	68	68	214
IAM 450		5	452	7.2	250	300	350	600	680	6	91	68	68	214
IAM 500		5	491	7.8	250	300	350	600	680	6	91	68	68	214
IAM 600		5	594	9.4	250	300	350	550	630	6	91	68	68	214
IAM 650		5	660	10.5	250	300	350	500	580	6	91	68	68	214
IAM 700		5	707	11.2	250	300	350	450	500	6	91	68	68	214
IAM 800		5	791	12.6	250	300	350	400	450	6	91	68	68	214
IAM 700	H4	5	714	11.4	250	300	350	500	580	6	107	80	92	267
IAM 800		5	792	12.6	250	300	350	450	530	6	107	80	92	267
IAM 850		5	847	13.5	250	300	350	450	530	6	107	80	92	267
IAM 900		5	904	14.4	250	300	350	450	530	6	107	80	92	267
IAM 1000		5	992	15.8	250	300	350	330	400	6	107	80	92	267
IAM 1100		5	1116	17.8	250	300	350	330	400	6	107	80	92	267

MOTOR TECHNICAL DATA

MODEL		N° of pistons	Displacement	Specific Torque	Pressure			Speed		Max Case Pressure	Max Power		Dry Weight	Inertia moment of rotating parts
					Max Cont.	Max Int.	Peak	Max Continuous	Peak					
			cc/rev	Nm/bar	bar	bar	bar	rpm	rpm	bar	hp	kW	kg	kg cm^2
IAM 1200	H4	5	1192	19.0	250	300	350	300	350	6	107	80	92	267
IAM 1250		5	1247	19.8	250	300	350	250	300	6	107	80	92	267
IAM 1400		5	1332	21.2	250	300	350	230	280	6	107	80	92	267
IAM 1100	H45	5	1183	18.8	250	300	350	350	400	6	161	120	118	380
IAM 1400		5	1376	21.9	250	300	350	300	350	6	161	120	118	380
IAM 1600		5	1648	26.2	250	300	350	275	325	6	161	120	118	380
IAM 1800		5	1815	28.9	250	300	350	250	300	6	161	120	118	380
IAM 1000	H5	5	1094	17.4	250	300	350	350	400	6	161	120	173	697
IAM 1200		5	1231	19.6	250	300	350	300	350	6	161	120	173	697
IAM 1400		5	1376	21.9	250	300	350	300	350	6	161	120	173	697
IAM 1500		5	1528	24.3	250	300	350	300	350	6	161	120	173	697
IAM 1600		5	1648	26.2	250	300	350	300	340	6	161	120	173	697
IAM 1800		5	1815	28.9	250	300	350	250	300	6	161	120	173	697
IAM 2000		5	2035	32.4	250	300	350	230	260	6	161	120	173	697
IAM 2200		5	2220	35.3	250	300	350	220	240	6	161	120	173	697
IAM 2200	H55	5	2126	33.8	250	300	350	240	280	6	228	170	173	837
IAM 2500		5	2525	40.2	250	300	350	240	280	6	228	170	173	837
IAM 2800		5	2807	44.7	250	300	350	240	280	6	228	170	173	837
IAM 3000		5	3028	48.2	250	300	350	230	270	6	228	170	173	837
IAM 2200	H6	5	2206	35.1	250	300	350	220	260	6	228	170	308	1745
IAM 2500		5	2525	40.2	250	300	350	220	260	6	228	170	308	1745
IAM 2800		5	2807	44.7	250	300	350	220	260	6	228	170	308	1745
IAM 3000		5	2983	47.5	250	300	350	210	250	6	228	170	308	1745
IAM 3200		5	3289	52.3	250	300	350	200	240	6	228	170	308	1745
IAM 3500		5	3479	55.4	250	300	350	200	240	6	228	170	308	1745
IAM 3900	H7	7	3907	62.2	250	300	350	160	200	6	241	180	405	4064
IAM 4300		7	4343	69.1	250	300	350	150	190	6	241	180	405	4064
IAM 4600		7	4616	73.5	250	300	350	140	190	6	241	180	405	4064

MOTOR TECHNICAL DATA

MODEL		N° of pistons	Displacement	Specific Torque	Pressure			Speed		Max Case Pressure	Max Power		Dry Weight	Inertia moment of rotating parts
					Max Cont.	Max Int.	Peak	Max Continuous	Peak					
			cc/rev	Nm/bar	bar	bar	bar	rpm	rpm	bar	hp	kW	kg	Kg cm^2
IAM 5000	H7	7	5088	81.0	250	300	350	140	180	6	241	180	405	4064
IAM 5400		7	5384	85.7	250	300	350	130	170	6	241	180	405	4064
IAM 6000	H8	10	5966	95.0	250	290	320	120	140	6	255	190	590	5380
IAM 6500		10	6581	104.7	250	290	320	120	140	6	255	190	590	5380
IAM 6800		10	6962	110.8	250	290	320	120	140	6	255	190	590	5380
IAM 7600		10	7620	121.3	190	230	280	90	100	6	241	180	590	5380
IAM 8000		10	8062	128.3	180	220	270	80	90	6	241	180	590	5380

HYDRAULIC FLUIDS RECOMMENDATIONS

HYDRAULIC FLUIDS

We recommend the use of hydraulic oils with anti-wear additives (ISO HM or HV) and minimum viscosity index of 95.
Once normal working temperature is reached, oil viscosity must be at least 12 cSt, preferably in the range from 20 to 60 cSt.
Hydraulic oils meeting Denison MF-O, Vickers M-2952-S I-286-S performance requirements and DIN 51524 specifications, are preferred.

Mineral hydraulic oils are divided into four main types, designated by the International Standards Organisation (ISO) as HH, HL, HM and HV. We advise to use only products with HM or HV specifications.

HM type

These are the most widely employed hydraulic oils. They include small quantities of anti-wear additives to provide significant improvement in wear reduction. "Superior" quality HM type oils can be used for all equipment, with the added assurance that they will be suitable for the highest temperature.

HV type

HV hydraulic oils show minimal change in viscosity with temperature variations.

OIL VISCOSITY RECOMMENDATION

Room temperature HM type ISO-VG

- -20°C / 0°C BP ENERGOL HLP - HM 22
- -15°C /+5°C BP ENERGOL HLP - HM 32
- -8°C /+15°C BP BNERGOL HLP - HM 46
- 0°C /+22°C BP ENERGOL HLP - HM 68
- +8°C /+30°C BP ENERGOL HLP - HM100
- -20°C /+5°C BP BARTRAN HV 32
- -15°C /+22°C BP BARTRAN HV 46
- 0°C /+30°C BP BARTRAN HV 68

Our motors have been designed to work also with:

- oils type ATF (Automatic Transmission Fluid)
- oils with viscosity SAE 10W - 20 -30
- multigrade motor oils SAE 10 W/40 or 15 W/40
- universal oils

During cold start- up, avoid high- speed operation until the system is warmed up to provide adequate lubrication.
Continuous working temperature must not exceed 70°C.
When the working conditions cause the oil viscosity decrease under the minimum recommended value, to guarantee a sufficient motor lubrication it is necessary an adequate motor flushing (see flushing page for more details).

FIRE RESISTANT OIL LIMITATIONS

	Max cont. pressure	Max int. pressure	Max speed
HFA, 5-95% oil-water	103 138		50%
HFB, 60-40% oil-water	138 172		100%
HFC, water-glycol	103 138		50%
HFD, ester phosphate	250 293		100%

FILTRATION

Hydraulic systems oil must always be filtered.
The choice of filtration grade derives from needs of service life and money spent. In order to obtain stated service life it is important to follow our recommendations concerning filtration grade.
When choosing the filter it is important to consider the amount of dirt particles that filter can absorb and still operate satisfactorily. For that reason we recommend filters showing when you need to substitute filtering cartridge.

- 25 µm filtration required in most applications
- 10 µm filtration in closed circuit applications

OXIDATION

Hydraulic oil oxidizes with time of use and temperature. Oxidation causes changes in colour and smell, acidity increase or sludge formation in the tank. Oxidation rate increases rapidly at surface temperatures above 60°C, in these situations oil should be checked more often.
The oxidation process increases the acidity of the fluid; the acidity is stated in terms of the "neutralization number". Oxidation is usually slow at the beginning and then it increases rapidly.
A sharp increase (by a factor of 2 to 3) in neutralization number between inspections shows that oil has oxidized too much and should be replaced immediately.

WATER CONTENT

Oil contamination by water can be detected by sampling from the bottom of the tank. Most hydraulic oils repel the water, which then collects at the bottom of the tank. This water must be drained off at regular intervals. Certain types of transmission oils and engine oils emulsify the water; this can be detected by coatings on filter cartridges or a change in the colour of the oil. In such cases, obtain your oil supplier advice.

DEGREE OF CONTAMINATION

Heavy contamination of the oil causes wear rising in hydraulic system components. Contamination causes must be immediately investigated and remedied.

ANALYSIS

It is recommended oil being analyzed every 6 months. The analysis should cover viscosity, oxidation, water content, additives and contamination. Most oil suppliers are equipped to analyze oil state and to recommend appropriate action. Oil must be immediately replaced if the analysis shows that it is exhausted.

INSTRUCTIONS AND ADVICES

INSTALLATION

Hoses and piping must be clean and free from contamination. No other special requirements are necessary.

- Motor can be mounted in any position
- In run-away conditions you must use counterbalance valves
- Consult factory for intermittent applications

Splined adaptors (sleeves) are available upon request.

INSTALLATION CIRCUIT

The choice of open or closed loop circuit will be determined by the application.
Open loop circuits are cheaper and simpler to install.
Closed loop circuit is a superior circuit and usually takes up less space. It also offers better control features.

START UP

Motor case and pistons must be completely filled with oil before starting.
Do not load motor to maximum working pressure. Increase load gradually at start-up.

CASE DRAIN – CASE PRESSURE

Connect the case drain directly to tank.
The case drain port on the motor must be located on the highest point of the installation to ensure that the motor will always be full of oil. The case drain pressure must not exceed 6 bar continuous pressure.

IMPORTANT

When the motor is installed vertically with shaft pointing upwards, consult our Technical Department. If the motor is connected to high inertial loads, the hydraulic system must be designed to prevent peaks of pressure and cavitation.

TEMPERATURE

Maximum oil temperature must not exceed 70°C. Heath exchangers must be used with higher temperatures.

VISCOSITY

The motor works satisfactory in a range of 3°E to 10°E oil viscosity. Best performance is obtained at the highest viscosity.

BACK PRESSURE

Don't exceed 70 bar back pressure.

HIGH PEAKS APPLICATIONS

In case of high pressure peaks applications, a Nitem per treatment on cylinders is suggested to increase wear and tear resistance.

CONTINUOUS HIGH SPEED DUTY

In case of continuous high speed duty, it is suggested to mount a central reinforced bearing on motor shaft, please contact our Technical Department.

MINIMUM SPEED

Standard minimum speed is about 0.5 to 3 rpm (depending on motor displacement). If you need less speed, it is possible to modify some parts of the distributor.

FLUSHING

In the need of Flushing, a 2nd drain hole is available upon request. When flushing is not available, it is possible to create an inner motor drain to help cooling.

COOLING FLOW

If the motor operates in the Intermittent Power zone, it may require a cooling flow of 20 l/min (5 gpm) to keep a drain flow viscosity of 40 cSt minimum.

FOR MORE DETAILS ON THE ABOVE MENTIONED ARGUMENTS AND FOR ANY FURTHER INFORMATION PLEASE CONTACT OUR TECHNICAL DEPARTMENT.

BEARINGS

Bearings lifetime depends on the type of bearing, on motor speed and on working loads.
Lifetime is measured by L_{10} which is called "theoretic lifetime". It represents the number of cycles that 90% of identical bearings can effort at the same load without showing wear and tear. It is calculated by the following equation:

$$L_{10} = \left(\frac{C}{P}\right)^p$$

where: C = theoretical dynamic coefficient (depending on the bearing size)
P = radial load
p = exponent (p=3 for ball bearings, p=10/3 for roller bearings)

When you work at constant speed, you can calculate the lifetime in hours with the following equation:

$$L_{10h} = \frac{10^6 \cdot L_{10}}{60 \cdot rpm} = \frac{10^6}{60 \cdot rpm}\left(\frac{C}{P}\right)^p [h]$$

When you don't have only radial or axial loads, you have to calculate an equivalent load:

$$P = X \cdot F_R + Y \cdot F_A$$

Where F_R = radial load,
X = radial coefficient,
F_A = axial load,
Y = axial coefficient

While F_R and F_A come from working conditions (i.e. torque), X and Y depend on the type of bearing and on the ratio $\frac{F_A}{F_R}$.

To help you in the expected lifetime calculation, Intermot provides you with an EXCEL calculation sheet. With this instrument you can easily calculate lifetime: you only need to choose the motor model, put speed, pressure and loads.

For further information or to have the calculation sheet, please contact our Technical Department.

SHAFT SEAL FEATURES

Type: BABSL
Form: AS DIN 3760
Material: SIMRIT® 72 NBR 902
SIMRIT® 75 FKM 595

1. Features

SIMMERRING® radial shaft seal with rubber covered O.D., short, flexibility suspensed, spring loaded sealing lip and additional dust lip: see Part B/ SIMMERRING®, sections 1.1 and 2.

2. Material

Sealing lip and O.D.:
- Acrylonitrile-butadiene rubber with 72 Shore A hardness (designation: SIMRIT® 72 NBR 902)
- Fluoro rubber with 75 Shore A hardness (designation: SIMRIT®75 FKM 595)

Metal insert:
- Plain steel DIN 1624

Spring:
- Spring steel DIN 17223

3. Application

For sealing pressurised media without additional backup ring, e. g. for rotational pressure sealing in hydraulic pumps, hydraulic motors, hydrodynamic clutches. Rubber covered O.D. assures sealing in the housing bore even in case of considerable surface roughness, thermal expansion or split housing.
Particularly suitable for sealing low viscosity and gaseous media.
Where high thermal stability and chemical resistance are required, SIMRIT® 75 FKM 595 material should be used.
Additional dust lip to avoid the entry of light and medium dust and dirt.

4. Operating conditions

See Part B/ SIMMERRING®, sections 2. 4.

Media:	mineral oils, synthetic oils	
Temperature:	-40°C to +100°C	(SIMRIT® 72 NBR 902)
	-40°C to +160°C	(SIMRIT® 75 FKM 595)
Surface speed:	up to 5 m/s	
Working pressure:	see diagram 1	

Maximum permitted values, depending on other operating conditions.

5. Housing and Machining Criteria

See Part B/ SIMMERRING®, sections 2.

Shaft: Tolerance:		ISO h11
Concentricity:		IT 8
Roughness:		Ra=0.2-0.8 µm
		Rz=1-4 µm
		Rmax=6 µm
Hardness:		45-60 HRc
	Roughness: preferably by	non oriented; plunge grinding
Housing: Tolerance:		ISO H8
Roughness:		Rmax<25 µm

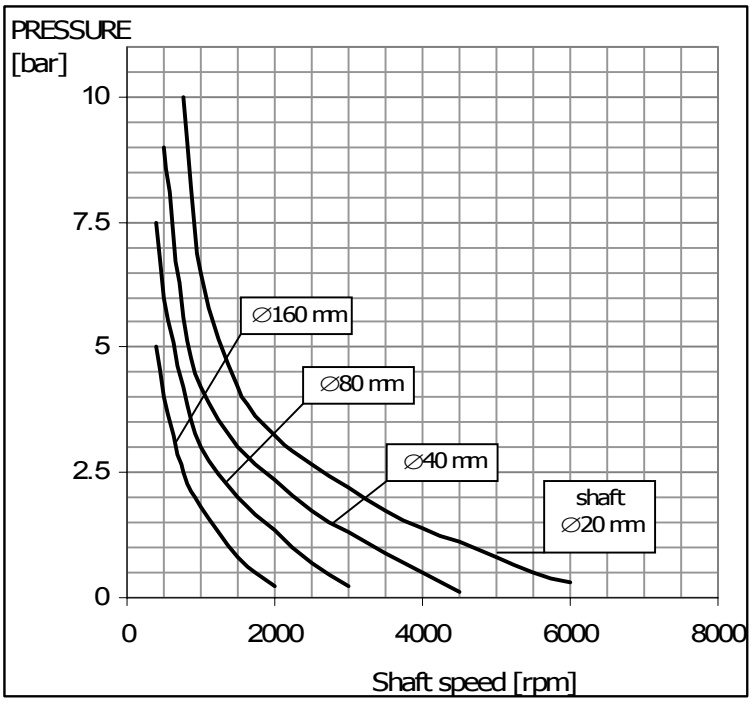


Diagram 1: Pressure Loading Limits

FLUSHING

FLUSHING FLOW

Cooling flow is necessary to assure the minimum oil viscosity. The following table shows the flushing flow approximate values that are suggested for IAM motors. In all the cases, the flushing flow must be adequate to assure the minimum oil viscosity (see page 7): therefore the flushing flow will depend by the motor displacement, working conditions and oil type, and must be set making some oil drain temperature monitoring.

Motor	Flushing flow [l/min]
IAM H1 80, 100	5
IAM H1 150, 175, 195, 200, 250, 300 IAM H2 200, 250, 300	6
IAM H2 350, 400, 500 IAM H3 350, 400, 450, 500	8
IAM H2 600 IAM H3 600, 650, 700, 800 IAM H4 700, 800, 850, 900, 1000, 1100 1200, 1250, 1400 IAM H5 1000, 1200, 1400, 1600, 1800, 2000	10
IAM H5 2200 IAM H6 2500, 2800, 3000, 3200, 3500	15
IAM H7 3900, 4300, 4600, 5000, 5400 IAM H8 6500, 6800, 7600, 8000, 8500	20

FLUSHING IN PERFORMANCE DIAGRAMS

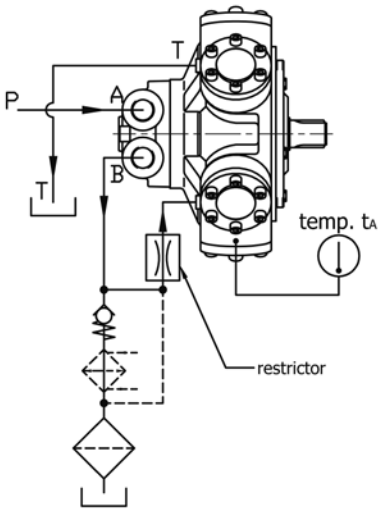
Each performance diagram shows working conditions where flushing is suggested (areas numbered form 4 to 6 in each performance diagram).

Area 1: Continuous operation
Area 2: Intermittent operation for period 3-5 minute every 10-15 minute
Area 3: Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
Area 4: **Continuous operation with flushing**
Area 5: **Intermittent operation for period 3-5 minute every10-15 minute with flushing**
Area 6: **Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing**

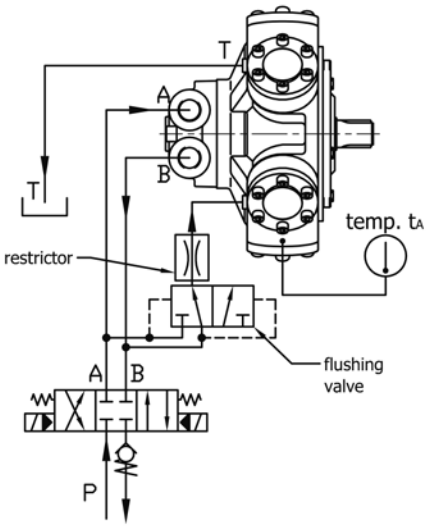
HIGH VOLUMETRIC EFFICIENCY MOTORS

On radial piston hydraulic motors with high volumetric efficiency, and therefore Intermot IAM series, there can be a phenomenon of oil-overheating in the body motor.
Oil drawing from the piston and from the distributor goes into body motor. When this oil quantity is very scanty, it means there's a good volumetric efficiency.
In some cases this is positive, like for winch on crane truck or trawl winch, because high volumetric efficiency avoids motor rotation even under external stress.
This scanty quantity of oil is not a problem because the motor works at high pressure only for a short period of time.
In other cases, this high efficiency can cause problems on the motor because oil exchange is missing.
In fixed applications, for example, where the motor is running constantly for 8 or more hours a day (like injection machines for plastic materials, press, bending machines, etc.) high volumetric efficiency can create temperature increasing in motor body.
In this case temperature increasing is to be avoided with the use of flushing.
Flushing consists in carrying fresh oil (taken from hydraulic circuit) in the body motor.
Oil is usually taken from return line to avoid any loss of efficiency.
In this way, all internal parts of the motor are protected with this lubrication and cooled with fresh oil, so that total efficiency is optimised.

FLUSHING CIRCUIT (ONE DIRECTION WORKING)



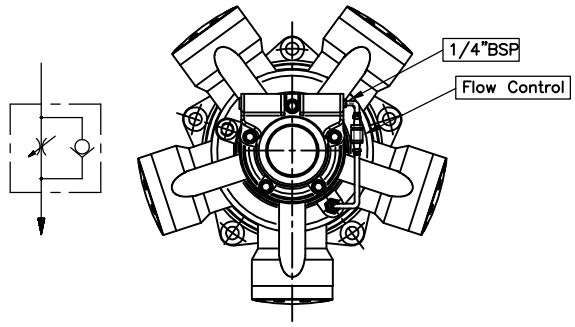
FLUSHING CIRCUIT (BIDIRECTIONAL WORKING)



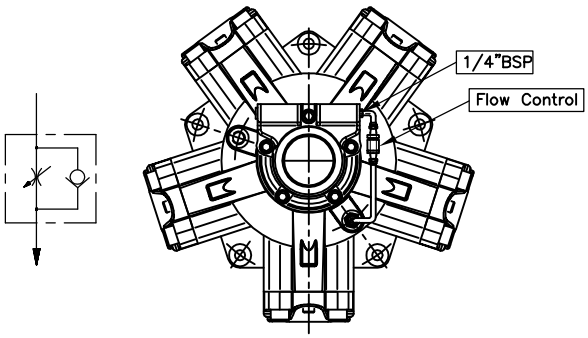
For further information please contact Intermot technical department

Motor flushing circuit example for unidirectional working

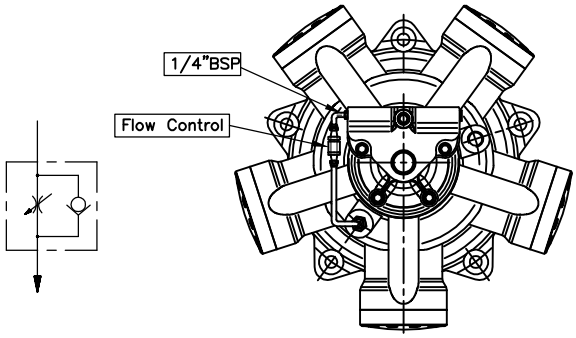
H45



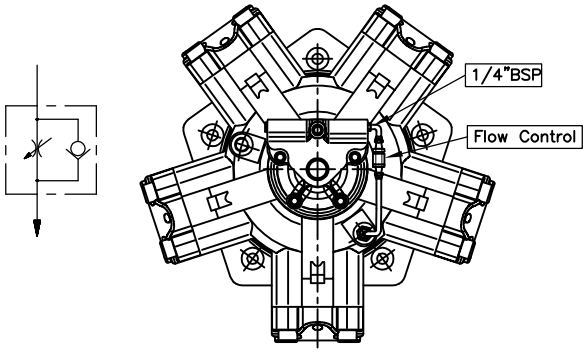
H5



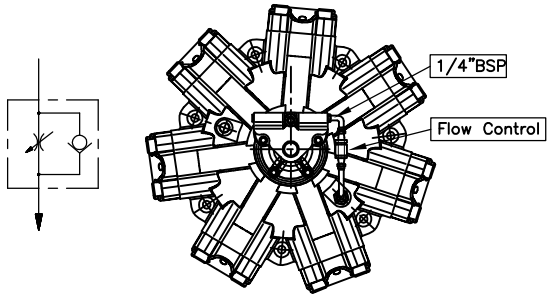
H55



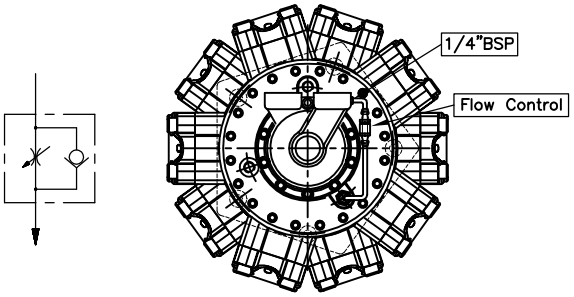
H6



H7

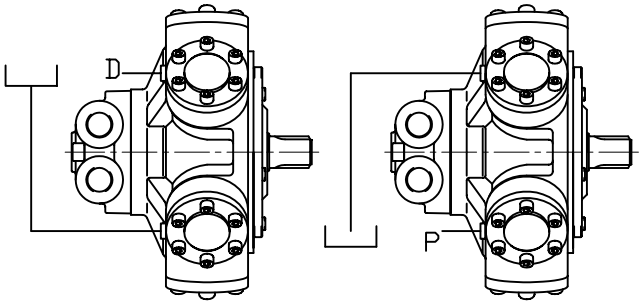


H8

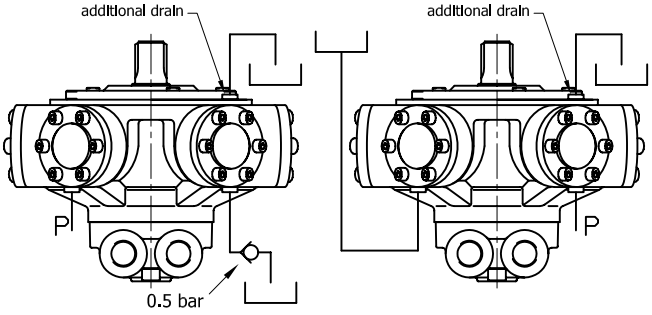


DRAIN RECOMMENDATIONS

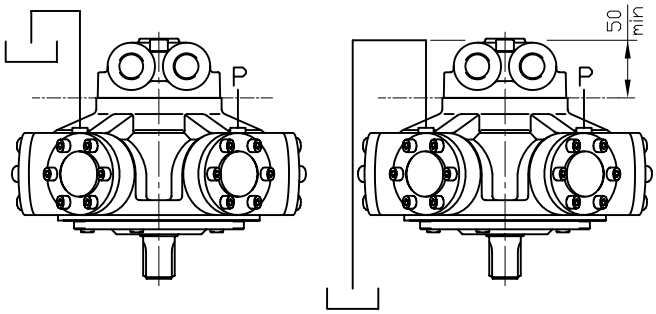
Motor axis horizontal



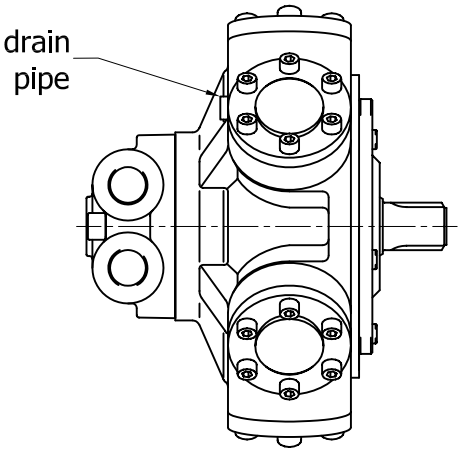
Axis vertical, shaft up



Axis vertical, shaft down



P=plug D=drain



IMPORTANT

For all motors IAM series, it is necessary TO FILL the motor case with hydraulic fluid, through the drain pipe, before start-up.

DISTRIBUTORS PRESSURE – FLOW

		D31/D310 (IAM H1, H2, H3, H4)	D40/D47 (IAM H1, H2, H3, H4, H45)	D55 (IAM H5, H45)	D75 (IAM H5, H45, H55)	D90 (IAM H55, H6, IAMH7)	D200 (IAM H8)
Pressure bar	Continuous	250 250 250 250				250 250	
	Max	500 500 400 500				500 500	
Flow L/min	Continuous	200 200 300 500				600	1000
	Max	400 400 600			1000	1200	2000

FORMULAS

- TORQUE (1)
- TORQUE (2)
- POWER (1)
- POWER (2)
- SPEED
- REQUIRED MOTOR DISPLACEMENT
- REQUIRED PUMP FLOW RATE

$$\text{Torque} = (\text{specific torque}) \cdot (\text{pressure})$$

$$\text{Torque [Nm]} = \frac{\text{displacement [cc/rev]} \cdot \text{pressure [bar]}}{62.8}$$

$$\text{Power [kW]} = \frac{\text{Torque [Nm]} \cdot \text{speed [rpm]}}{9549}$$

$$\text{Power [CV]} = \frac{\text{Torque [Nm]} \cdot \text{speed [rpm]}}{7023}$$

$$\text{speed [rpm]} = \frac{\text{flow rate [l/min]} \cdot 1000}{\text{displacement [cc/rev]}}$$

$$\text{displacement [cc/rev]} = \frac{\text{max required torque [Nm]} \cdot 62.8}{\text{max pressure [bar]}}$$

$$\text{flow [l/min]} = \frac{\text{displacement [cc/rev]} \cdot \text{max speed [rpm]}}{1000}$$

CONVERSIONS

LENGTH	1 m =	39.3701	in		
	=	3.2808	ft		
	=	1.0936	yd		
	=	1000	mm		
	1 in =	0.0833	ft		
	=	25.4	mm		
	1 ft =	0.3048	m		
	=	0.3333	yd		
	=	12	in		
	1 yd =	0.9144	m		
	=	3	ft		
	=	36	in		
	1 km =	1000	m		
	=	1093.6	yd		
	=	0.6214	mile		
	1 mile =	1.609	km		
	=	1760	yd		
MASS	1 kg =	2.2046	lb		
	1 lb =	0.4536	kg		
SPEED	1 m/s =	3.6	km/h		
	=	2.237	mph		
	=	3.2808	ft/s		
	1 km/h =	0.2778	m/s		
	=	0.6214	mph		
	=	0.9113	ft/s		
	1 mph =	1.609	km/h		
	=	0.447	m/s		
	=	1.467	ft/s		
	1 ft/s =	0.3048	m/s		
	=	1.0973	km/h		
	=	0.6818	mph		
FORCE	1 N =	0.102	kgf		
	=	0.2248	lbf		
	1 kgf =	2.205	lbf		
	=	9.806	N		
	1 lbf =	0.4536	kgf		
	=	4.448	N		
PRESSURE	1 bar =	14.223	psi		
	=	0.99	atm		
	=	1.02	ata		
	=	100000	Pa		
	=	100	kPa		
	=	0.1	MPa		
	1 psi =	0.0703	bar		
FLOW	1 l/min =	0.264	gpm		
	=	1000	cc/min		
	1 gpm =	3.785	l/min		
	=	3785	cc/min		
	1 m3/s =	60000	l/min		
	=	15852	gpm		
VOLUME	1 m3 =	1000	l		
	1 l =	61,023	in3		
	=	0,264	galUS		
	1 in3 =	0,01639	l		
	=	0,004326	galUS		
	1 galUS =	3,7879	l		
	=	231,15	in3		
POWER	1 kW =	1.341	HP		
	=	1.3596	CV		
	1 HP =	0.7457	Kw		
	=	1.0139	CV		
TORQUE	1 Nm =	0.102	kgm		
	=	0.7376	lbf ft		
	1 kgm =	9.806	Nm		
	=	7.2325	lbf ft		
	1 lbf ft =	0.1383	kgm		
	=	1.3558	Nm		

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HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H1 MODEL

IAM 80-100-150-175
195-200-250-300 H1

IAM 100-150-175-195
200-250/BH H1

IAM 100-150-175-195
200-250/GM05 H1

IAM 100-150-175-195
200-250/GM1 H1

IAM 200-250-300/PH H1

INDEX

TECHNICAL DATA H1

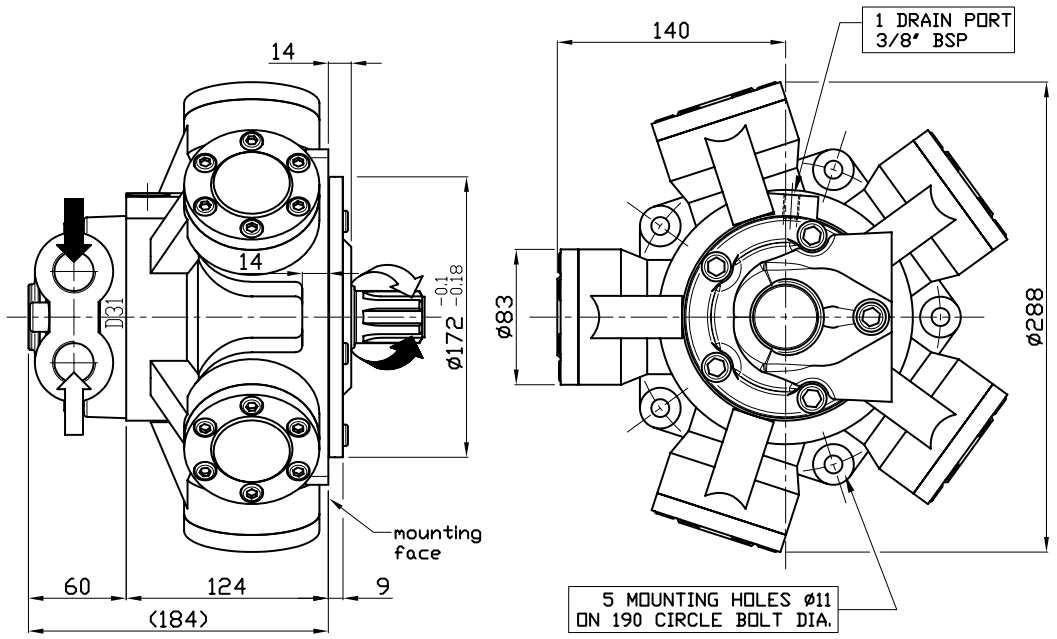
MODEL		IAM 80 H1	IAM 100 H1	IAM 150 H1	IAM 175 H1	IAM 195 H1	IAM 200 H1	IAM 250 H1	IAM 300 H1
Displacement	cc/rev	80	100	157	176	195	207	257	307
Specific Torque	Nm/bar	1.3	1.6	2.5	2.8	3.1	3.3	4.1	4.9
Max cont. Pressure	bar	250	250	250	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350	350	350	350
Max continuous speed	rpm	950	950	950	800	800	750	750	750
Peak speed	rpm	1050	1050	1050	900	900	850	850	850
Max continuous power	HP	27	37	37	37	37	37	37	37
	kW	20	27	27	27	27	27	27	27
Max power	HP	54	54	54	54	54	54	54	54
	kW	40	40	40	40	40	40	40	40

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 26 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 2÷3 rpm
- Flushing flow(*): IAM H1 80 – 100 – 150 5 l/min
  IAM H1 175 – 195 – 200 – 250 – 300 6 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

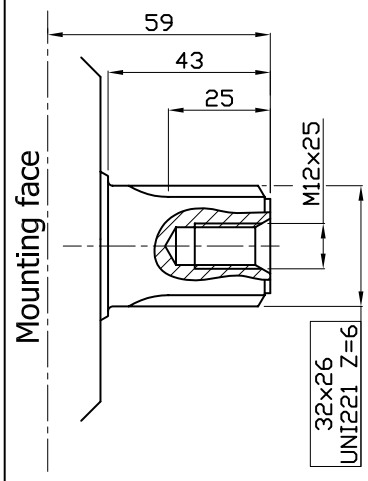
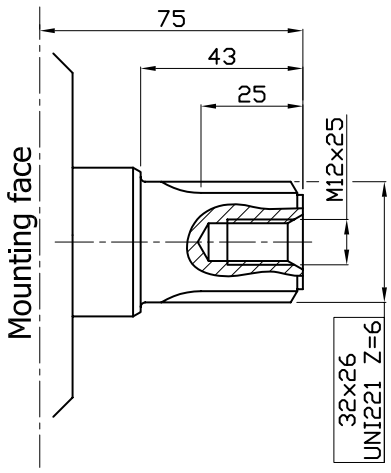
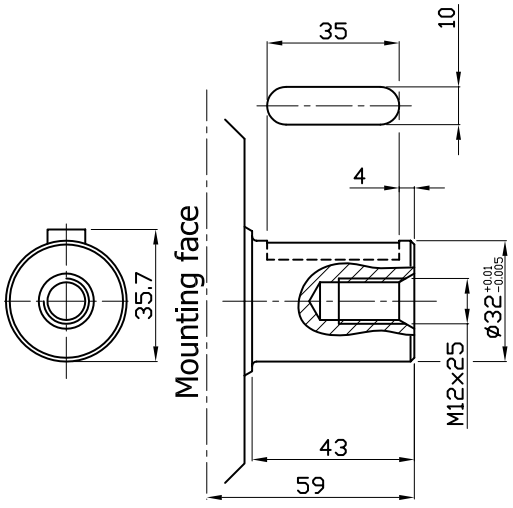
SIZE

IAM 80-100-150-175-195 H1



SHAFT

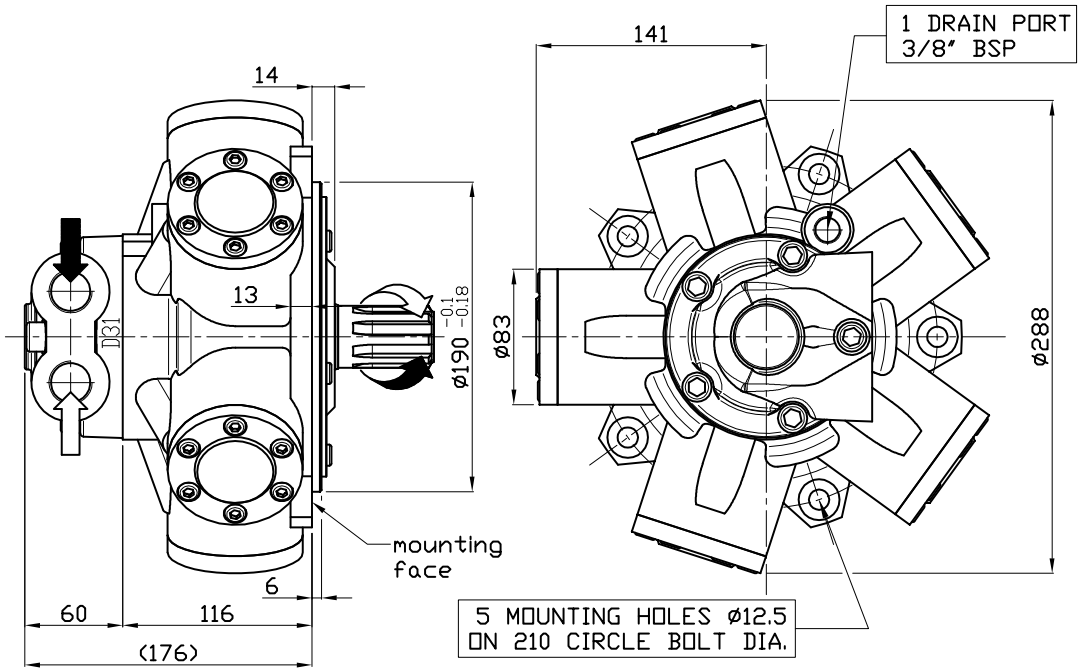
IAM 80-100-150-175-195 H1

A0: Standard splined shaft	A1: Splined shaft on request	A2: Parallel shaft on request
		

FEMALE SHAFT AVAILABLE UPON REQUEST N35x2x30x16x9H DIN 5480 (100 and 150 cc/Rev only)

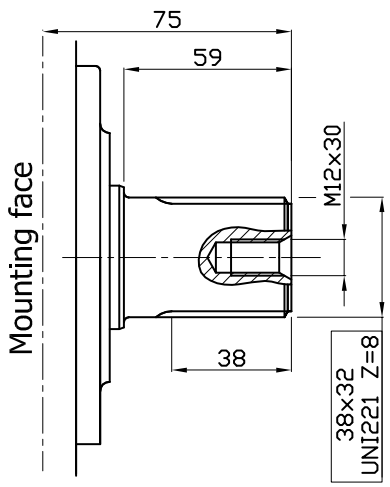
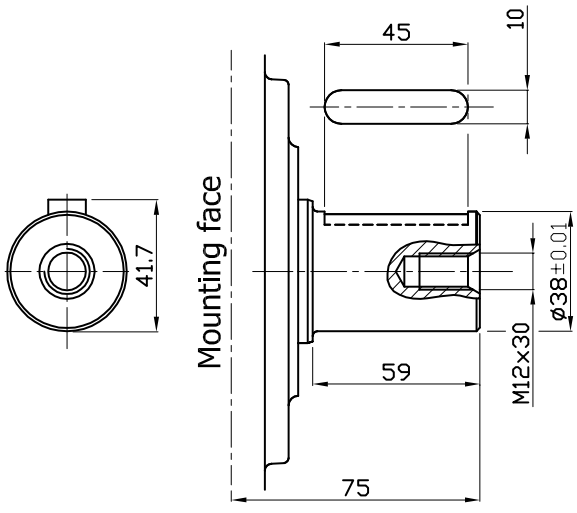
SIZE

IAM 200-250-300 H1



SHAFT

IAM 200-250-300 H1

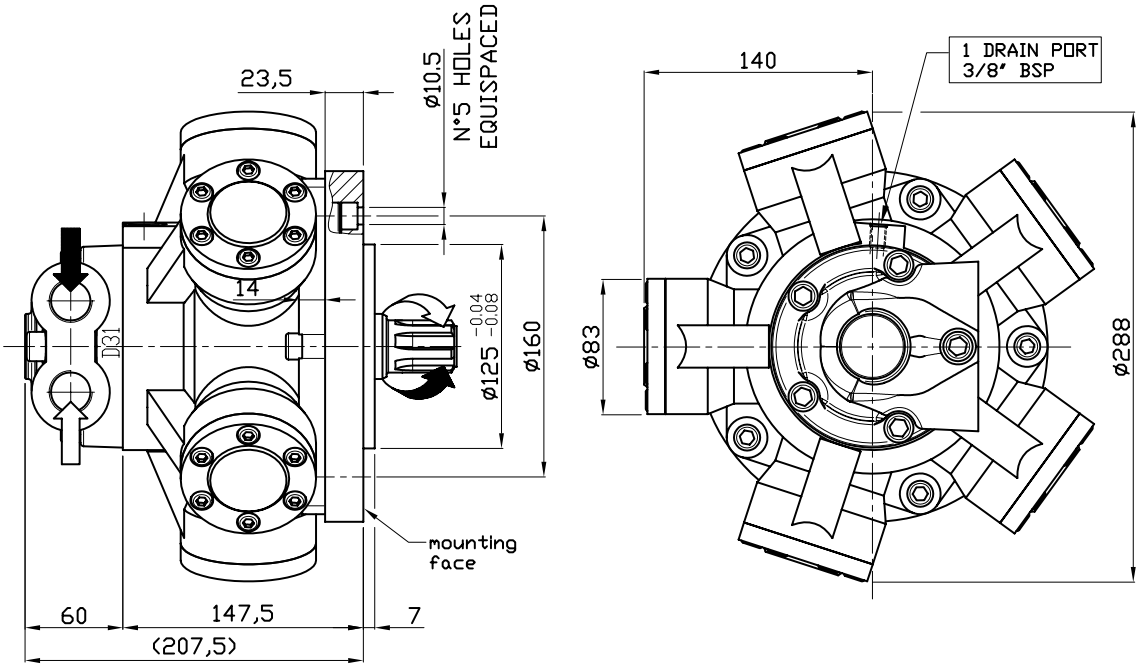
A0: Standard splined shaft	A2: Parallel shaft on request
	

FEMALE SHAFT AVAILABLE UPON REQUEST N35x2x30x16x9H DIN 5480 (300 cc/Rev only)

INTERCHANGEABLE WITH GM05

SIZE

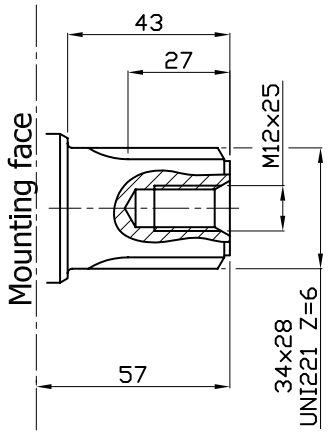
IAM 100/GM05 150/GM05 175/GM05 195/GM05 250/GM05 H1



SHAFT

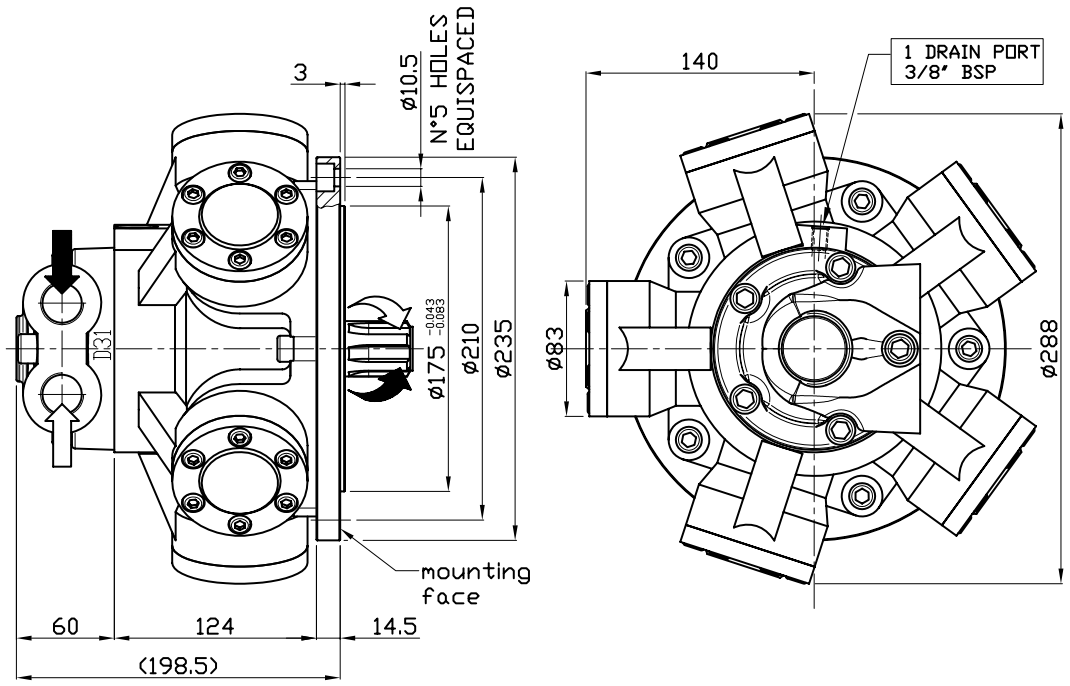
IAM 100/GM05 150/GM05 175/GM05 195/GM05 250/GM05 H1

A0: Standard splined shaft



SIZE

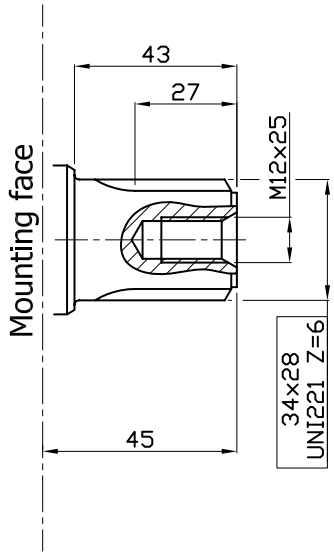
IAM 100/BH-150/BH-175/BH-195/BH-250/BH H1



SHAFT

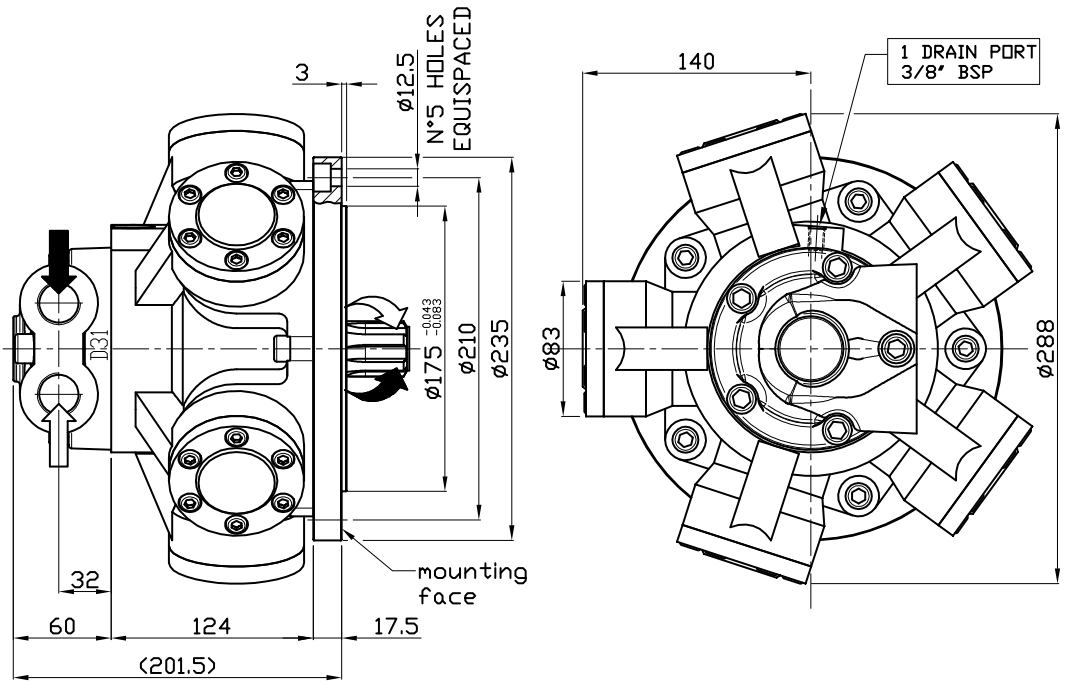
IAM 100/BH-150/BH-175/BH-195/BH-250/BH H1

A0: Standard splined shaft



SIZE

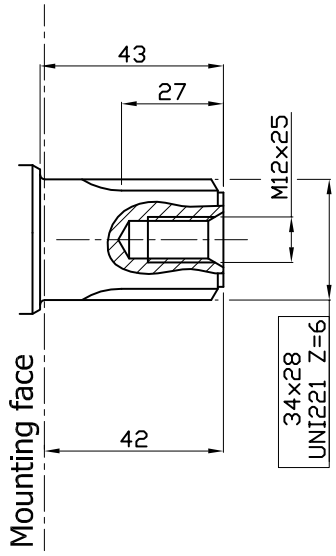
IAM 100/GM1-150/GM1-175/GM1-195/GM1-250/GM1 H1



SHAFT

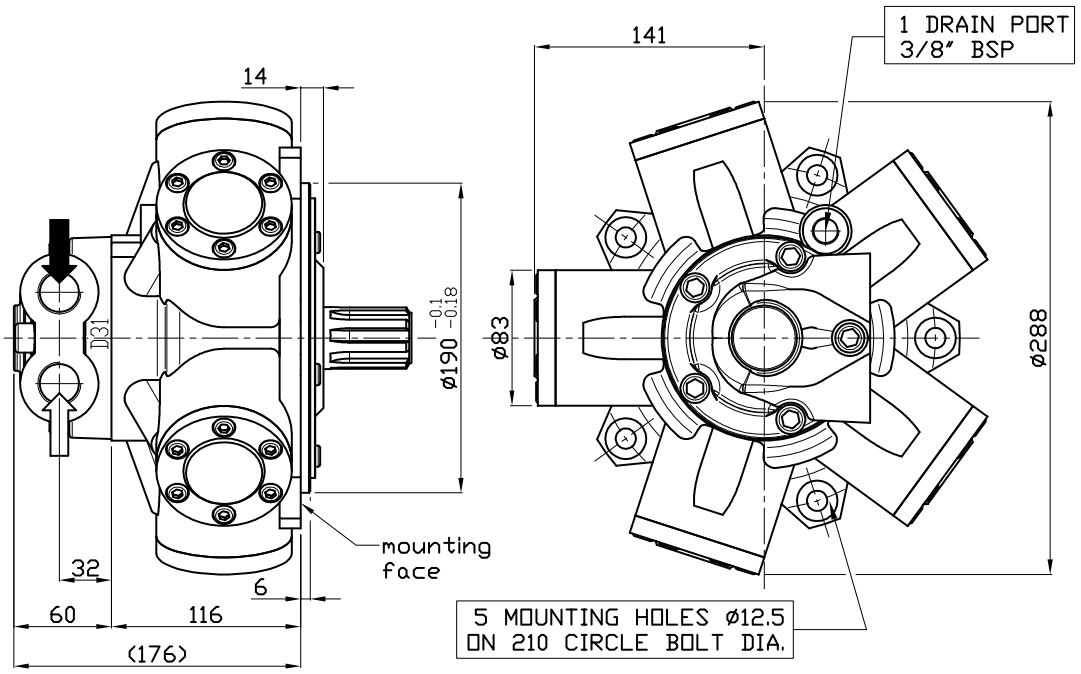
IAM 100/GM1-150/GM1-175/GM1-195/GM1-250/GM1 H1

A0: Standard splined shaft



SIZE

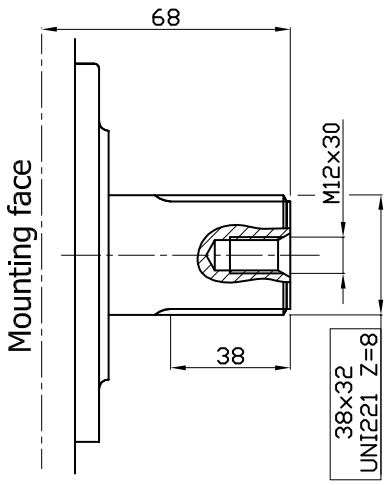
IAM 200/PH-250/PH-300/PH H1



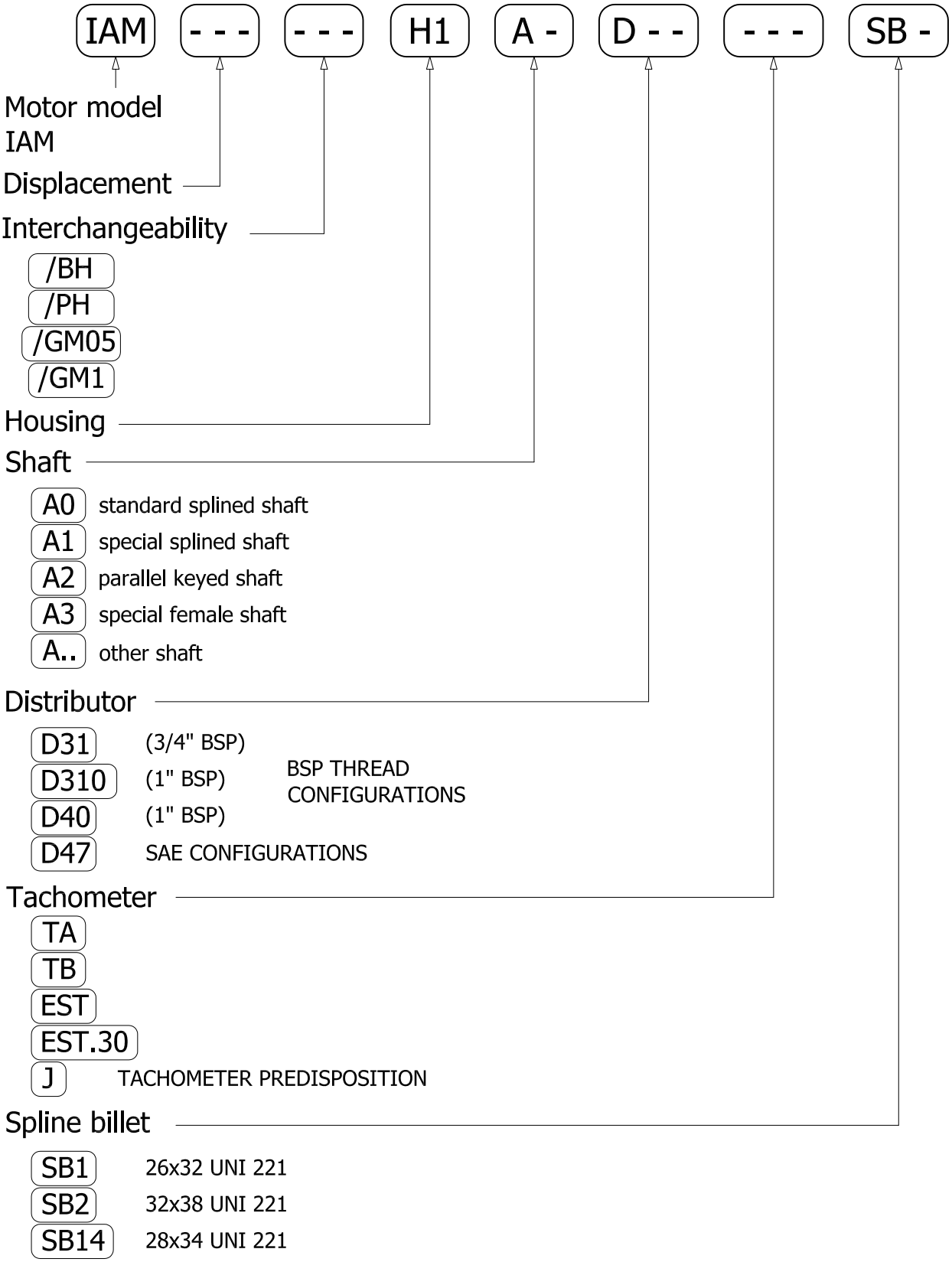
SHAFT

IAM 200/PH-250/PH-300/PH H1

A0: Standard splined shaft

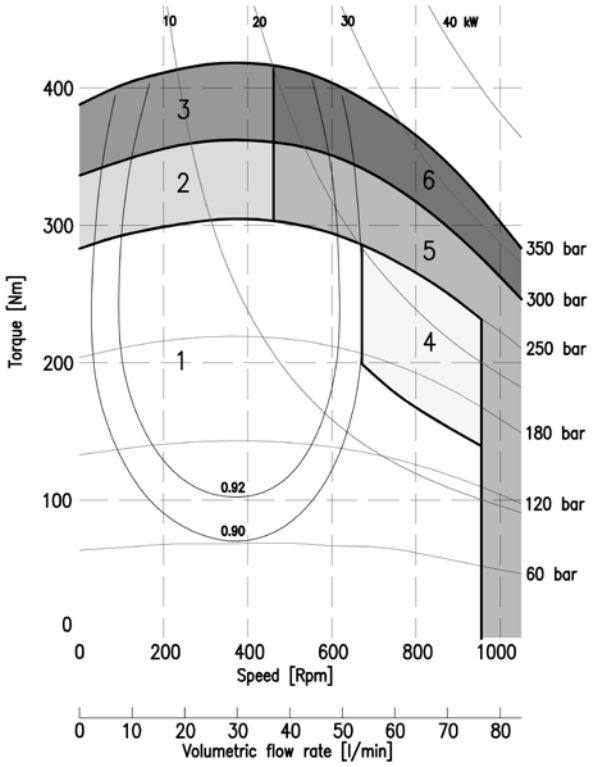


ORDERING INSTRUCTIONS

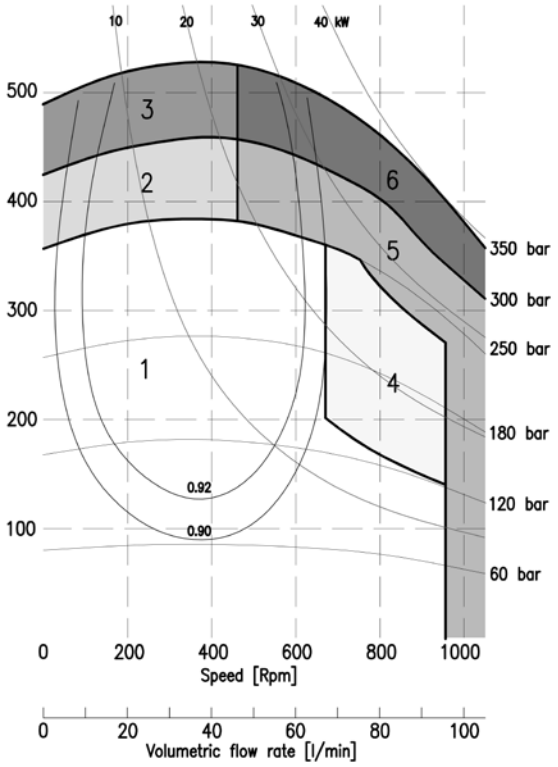


EXAMPLE: IAM.100/BH.H1.A0.D40.J.SB14
IAM.250.H1.A0.D31.TA.SB2

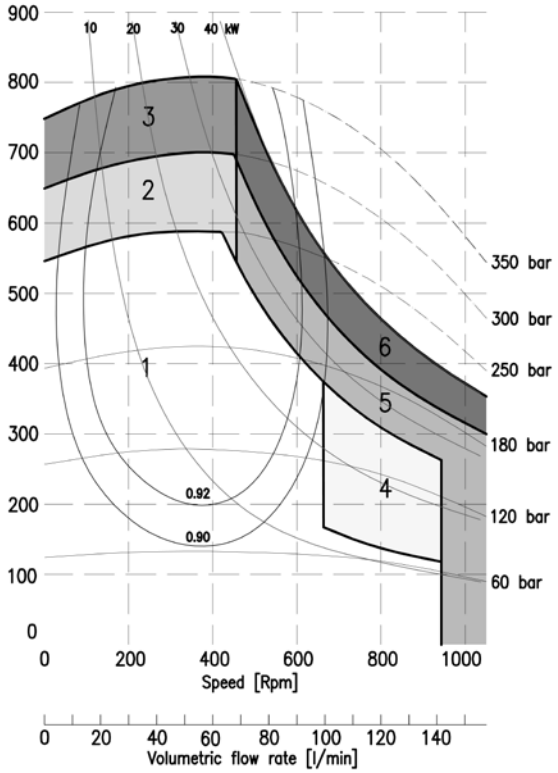
IAM 80 H1



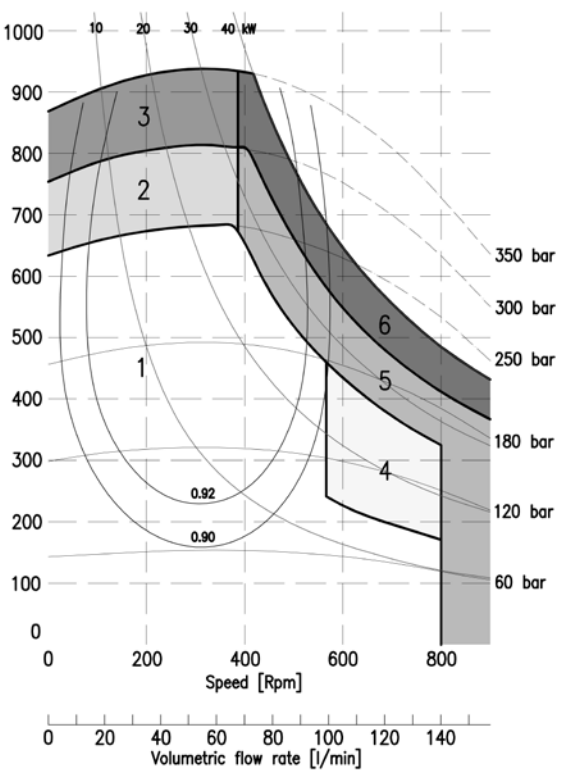
IAM 100 H1



IAM 150 H1

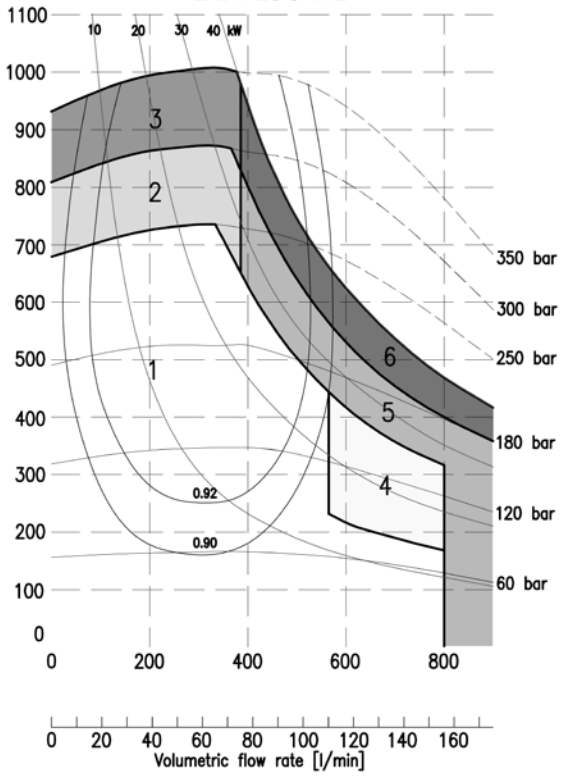


IAM 175 H1

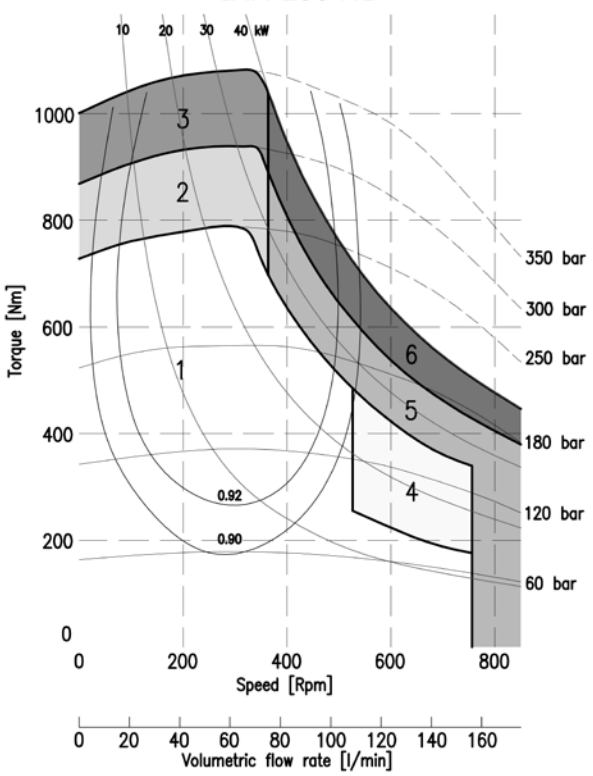


1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

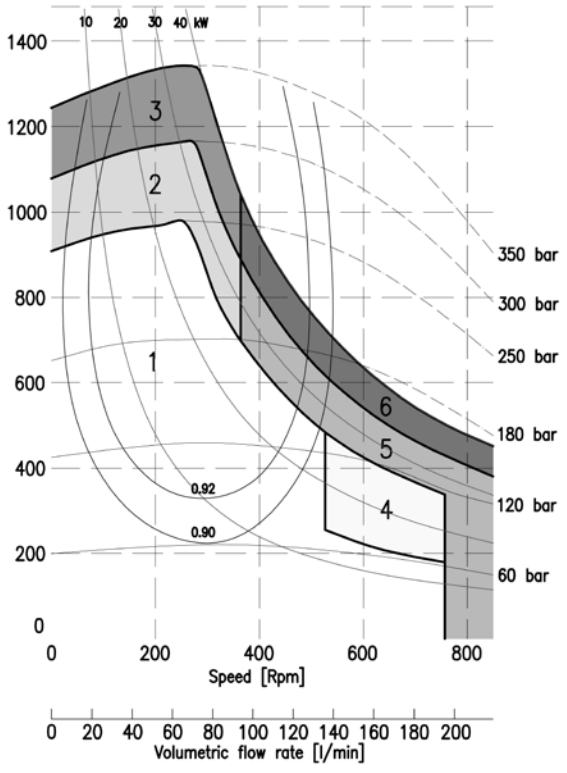
IAM 195 H1



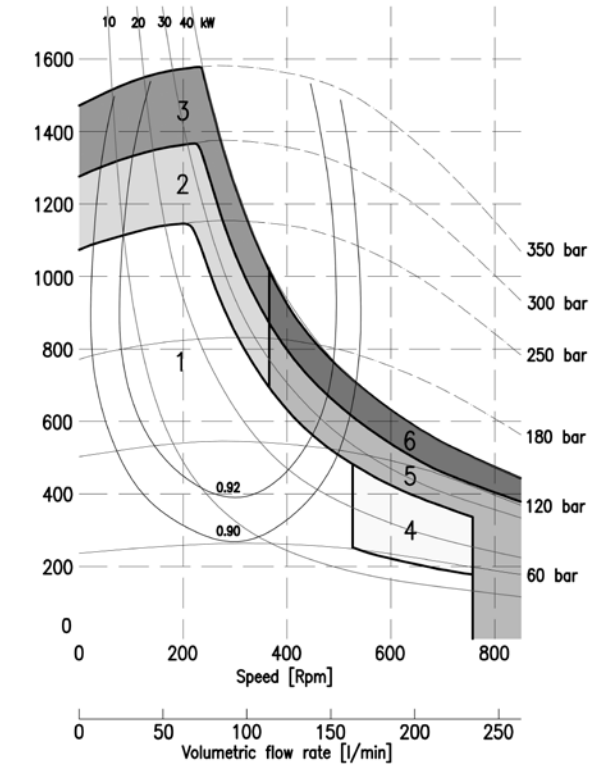
IAM 200 H1



IAM 250 H1



IAM 300 H1



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

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ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H2 MODEL

IAM 200-250-300-350
400-500-600 H2

IAM 190/C H2

IAM 300/C H2

IAM 200/B10 H2

IAM 200-250-300-350
400-500-600/PH H2

IAM 200-250-300-350
400-500-600/GM2 H2

IAM 200-250-300-350
400-500-600/S H2

INDEX

TECHNICAL DATA H2

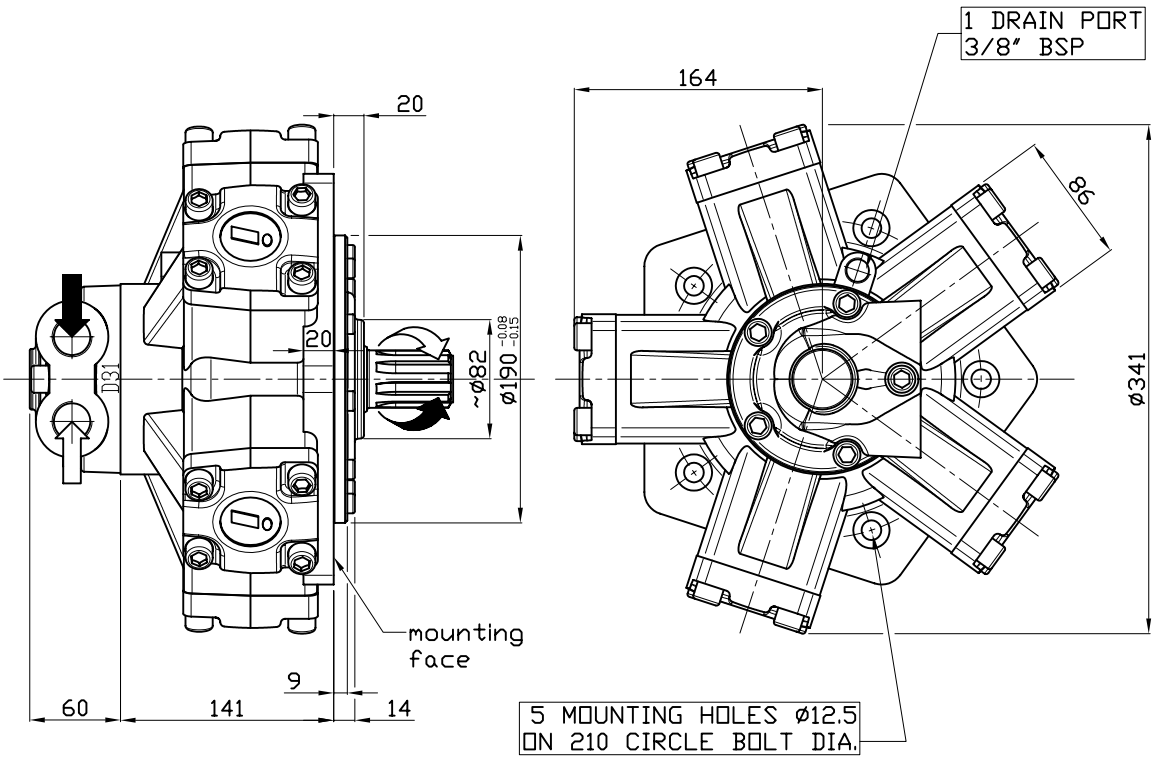
MODEL		IAM 200 H2	IAM 250 H2	IAM 300 H2	IAM 350 H2	IAM 400 H2	IAM 500 H2	IAM 600 H2
Displacement	cc/rev	198	253	314	362	424	492	584
Specific Torque	Nm/bar	3.2	4.0	5.0	5.8	6.7	7.8	9.3
Max cont. Pressure	bar	250	250	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350	350	350
Max continuous speed	rpm	800	750	750	650	600	500	500
Peak speed	rpm	900	850	850	750	700	600	600
Max continuous power	HP	45	45	45	45	45	45	45
	kW	33	33	33	33	33	33	33
Max power	HP	66	66	66	66	66	66	66
	kW	49	49	49	49	49	49	49

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 42 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 2 rpm
- Flushing flow(*): IAM H2 200 – 250 – 300 — 6 l/min
  IAM H2 350 – 400 – 500 — 8 l/min
  IAM H2 600 — 10 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

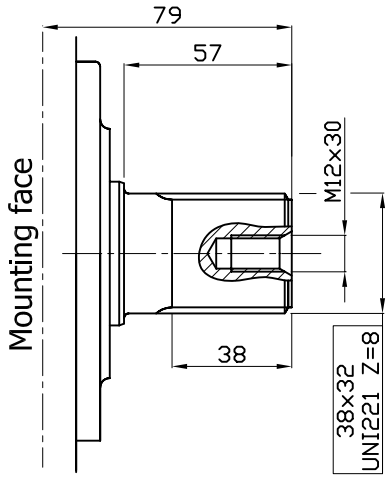
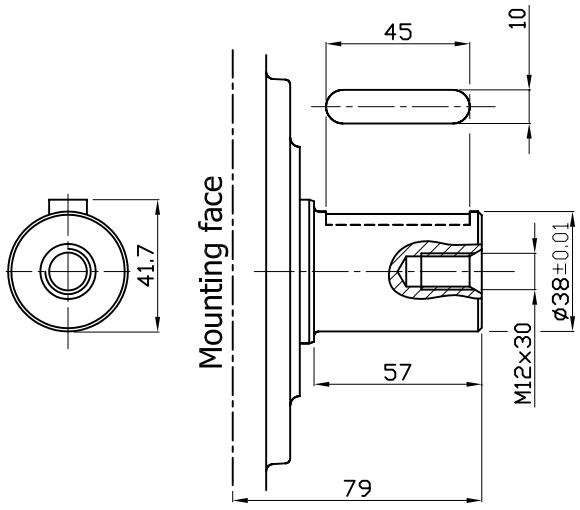
SIZE

IAM 200-250-300-350 H2



SHAFT

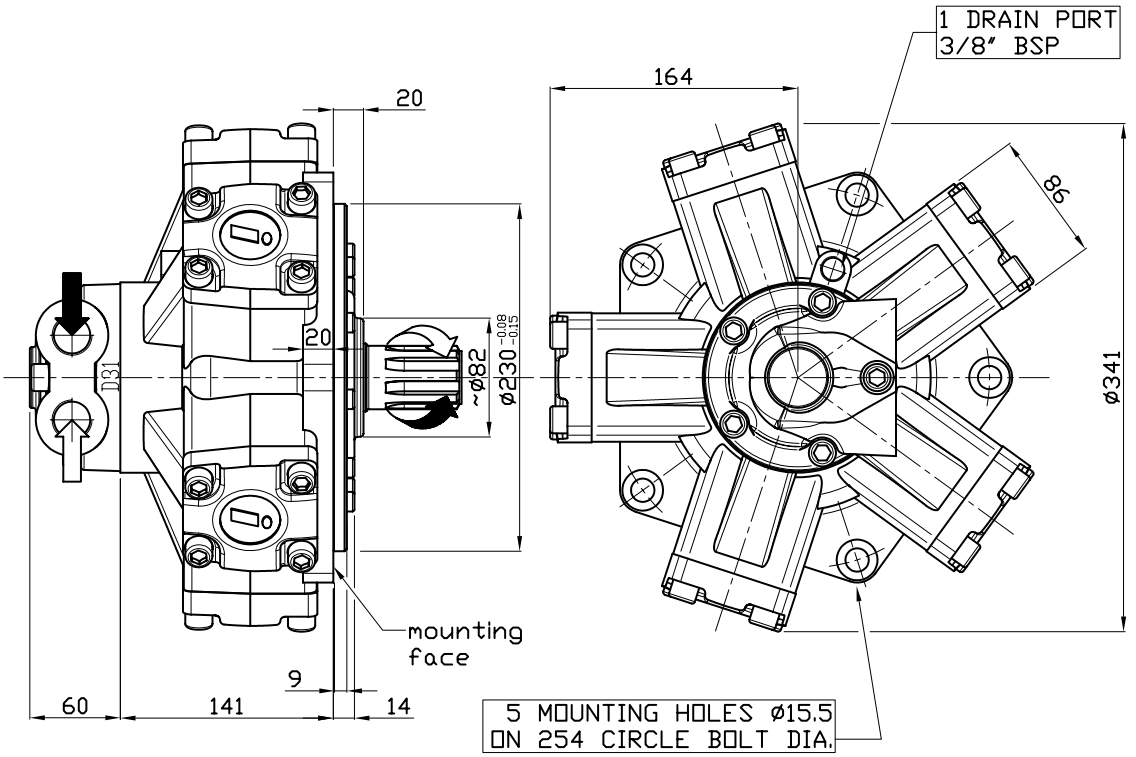
IAM 200-250-300-350 H2

A0: Standard splined shaft	A2: Parallel shaft on request
	

ONLY FOR IAM 300 H2: FEMALE SHAFT AVAILABLE UPON REQUEST 40x3x12x9H DIN 5480

SIZE

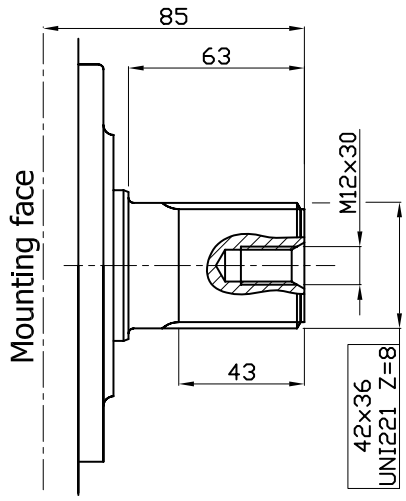
IAM 400-500-600 H2



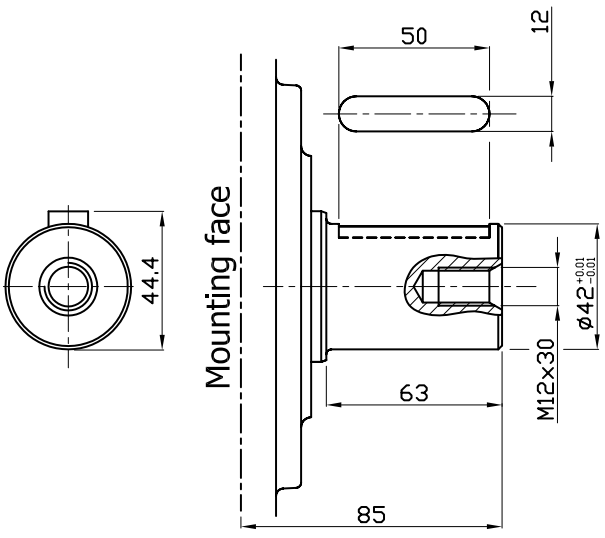
SHAFT

IAM 400-500-600 H2

A0: Standard splined shaft



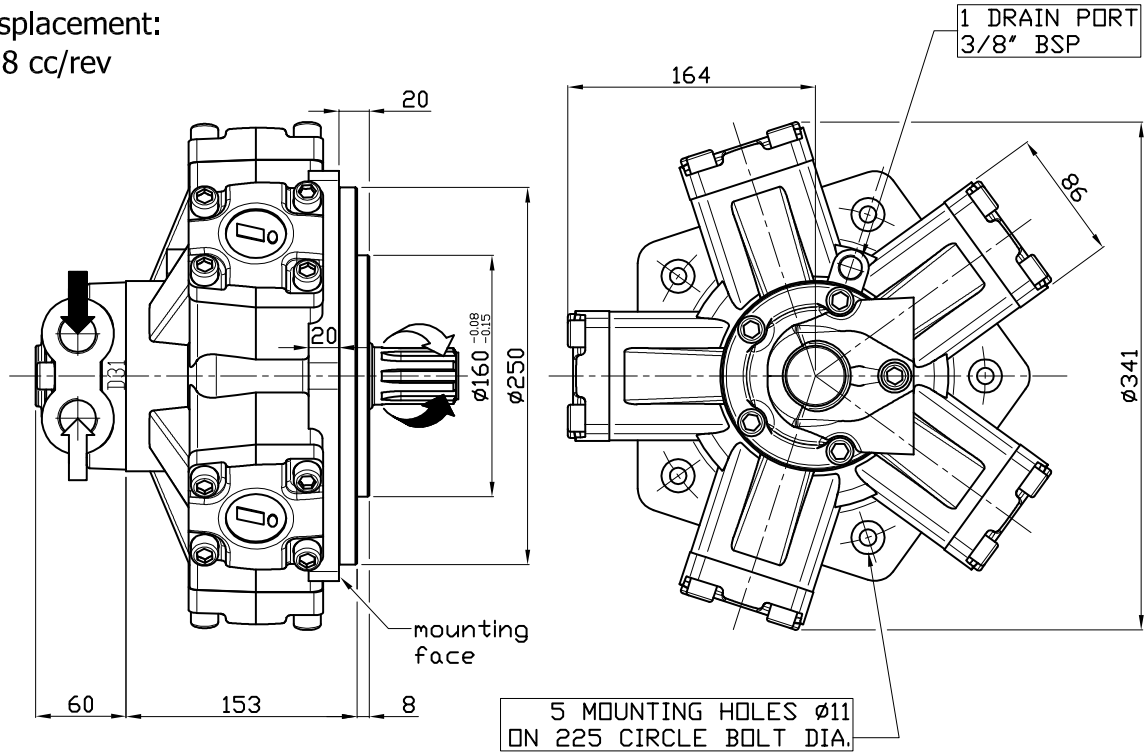
A2: Parallel shaft on request



SIZE

IAM 190/C H2

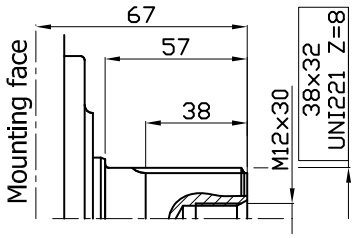
Displacement:
198 cc/rev



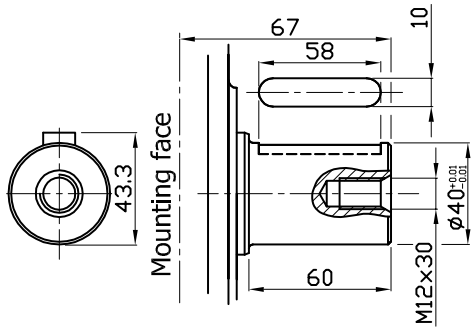
SHAFT & OPTION

IAM 190/C H2

A0: Standard splined shaft

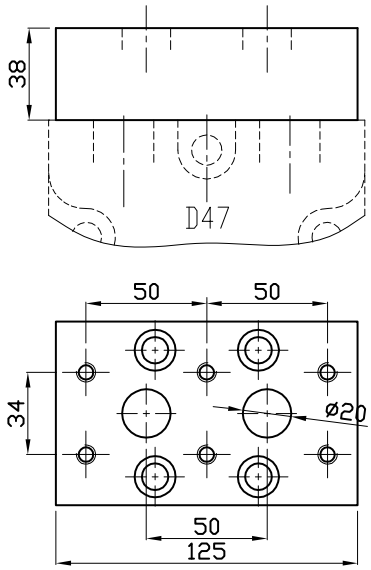


A2: Parallel shaft on request



FL1: connection block

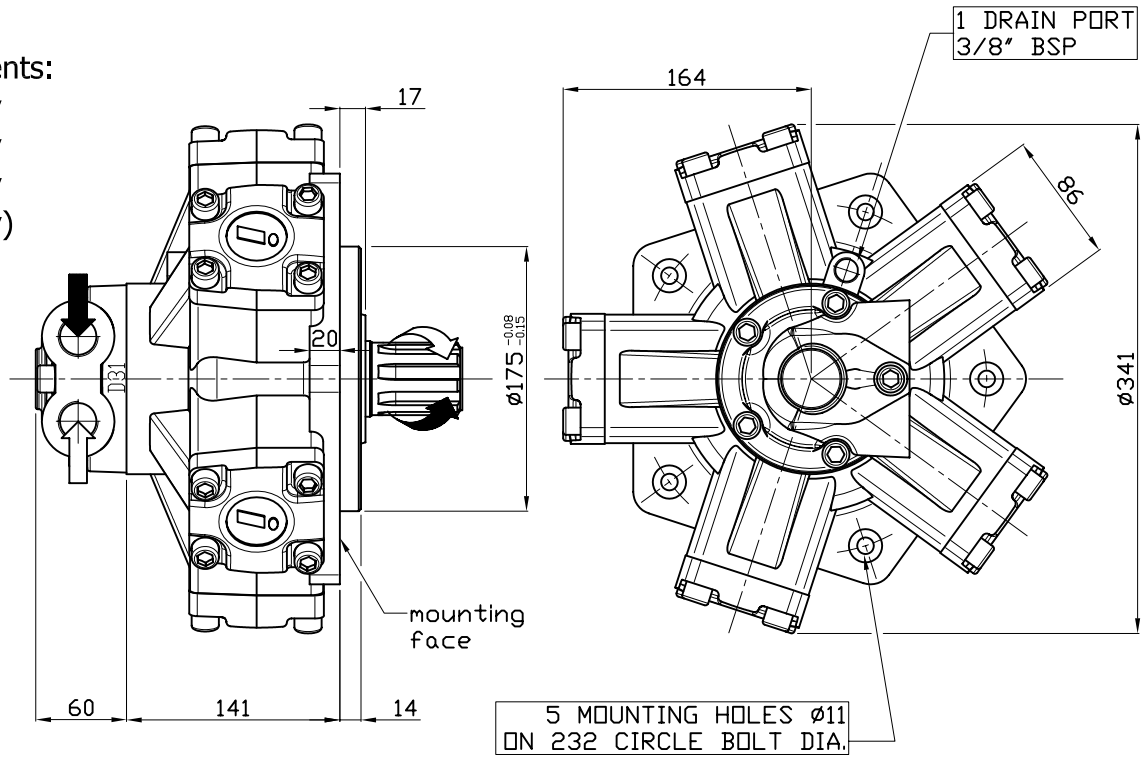
Connection block, fitting D47 distributor, for motor MR 160/190/250/300



SIZE

IAM 300/C H2

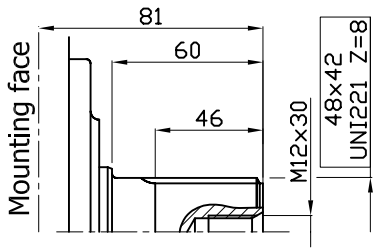
(available
displacements:
253 cc/Rev
289 cc/Rev
339 cc/Rev
393 cc/Rev)



SHAFT & OPTION

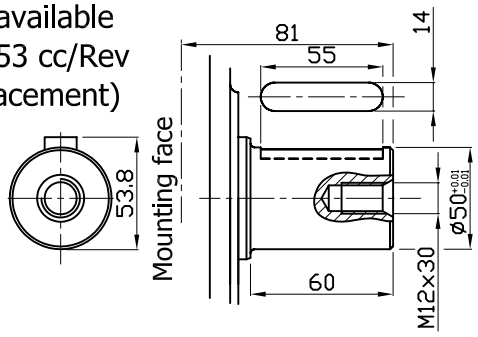
IAM 300/C H2

A0: Standard splined shaft



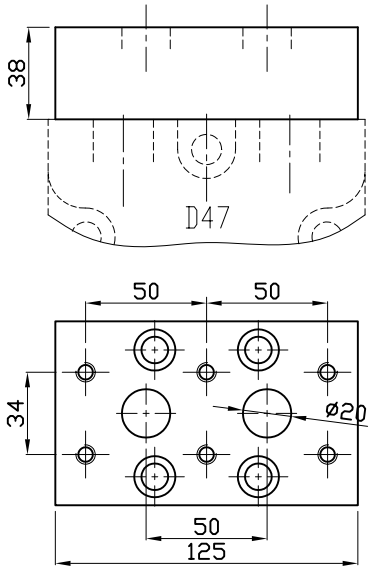
A2: Parallel shaft on request

(not available
for 253 cc/Rev
displacement)



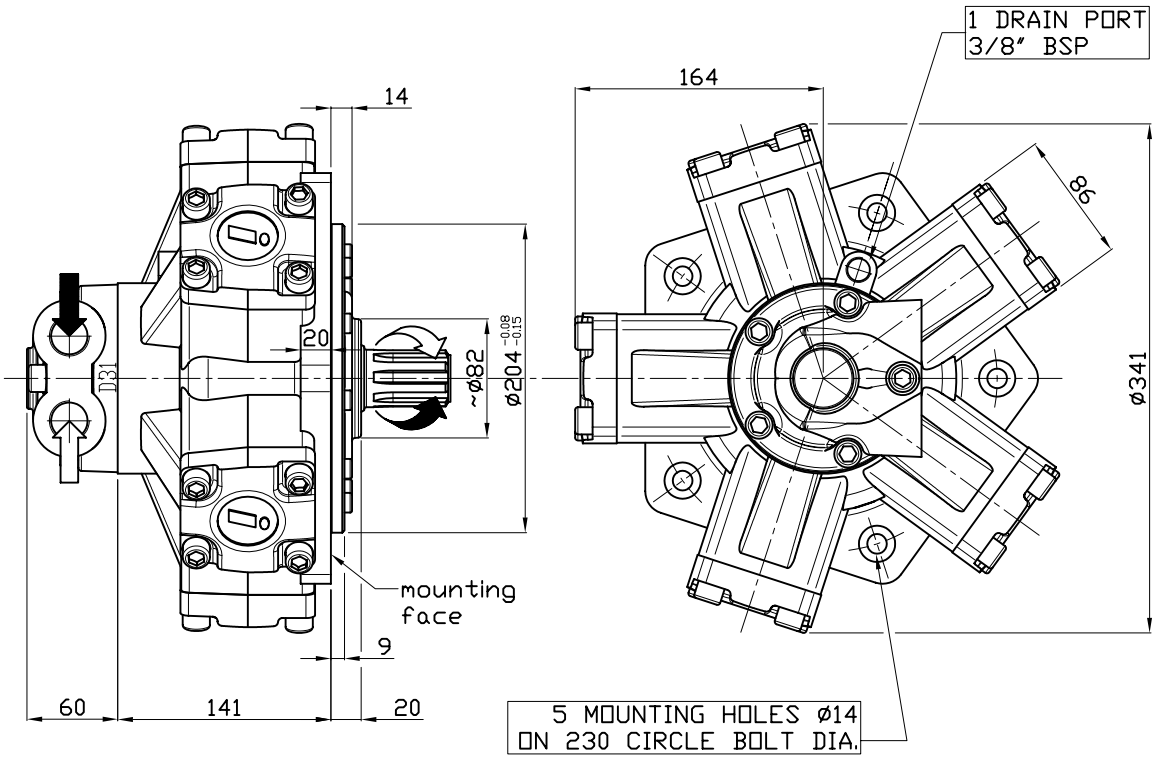
FL1: connection block

Connection block, fitting D47 distributor,
for motor MR 160/190/250/300



SIZE

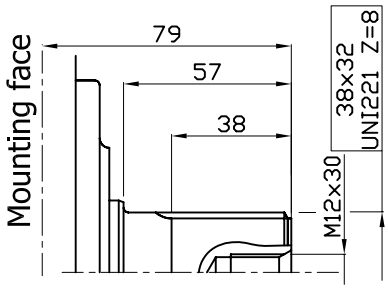
IAM 200/B10 H2



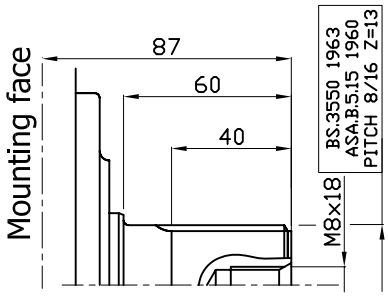
SHAFT

IAM 200/B10 H2

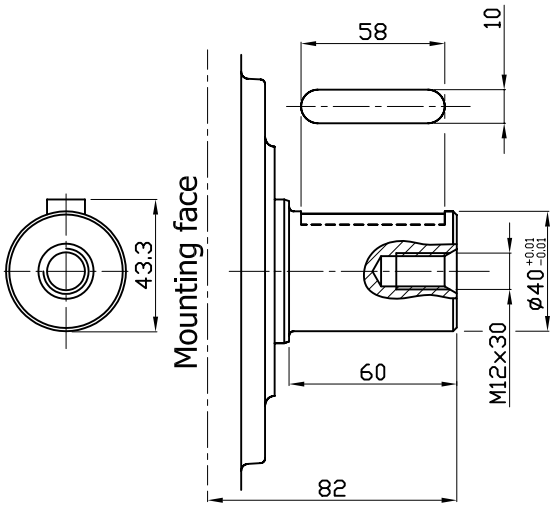
A0: Standard splined shaft



A1: Splined shaft on request

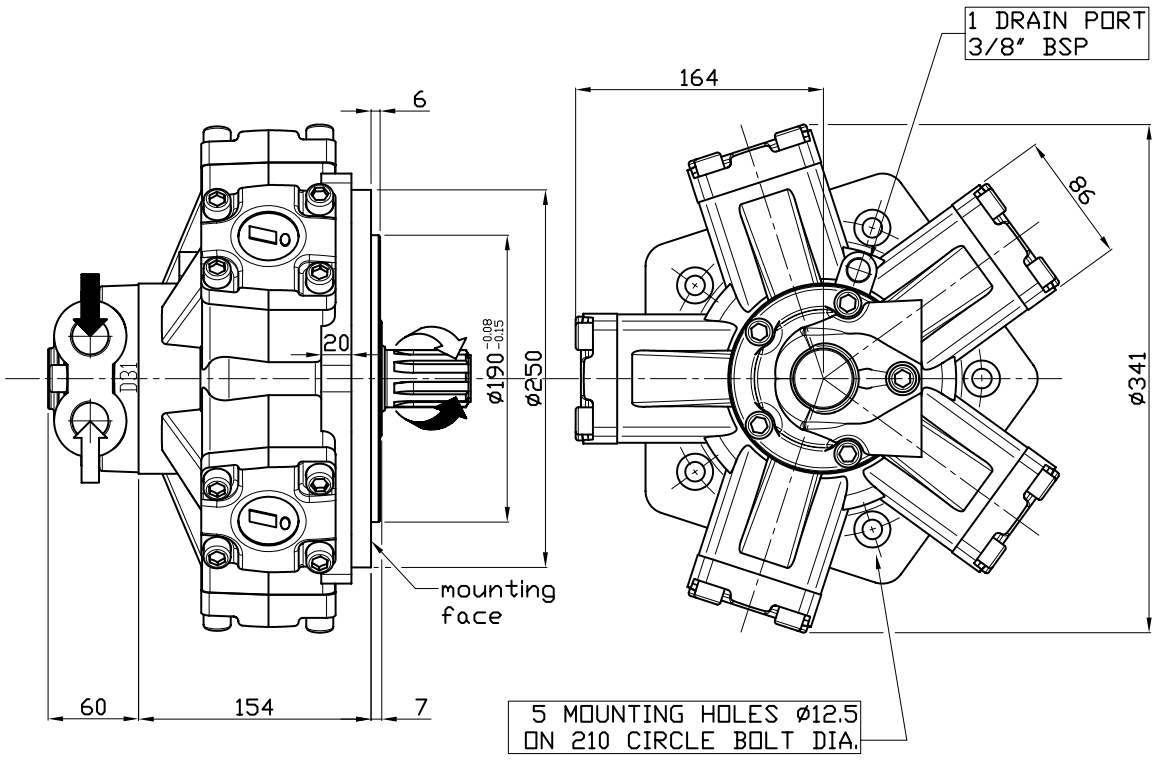


A2: Parallel shaft on request



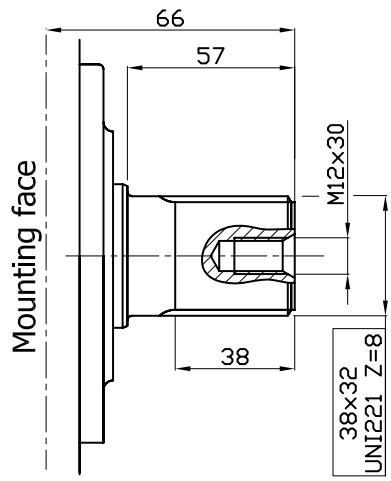
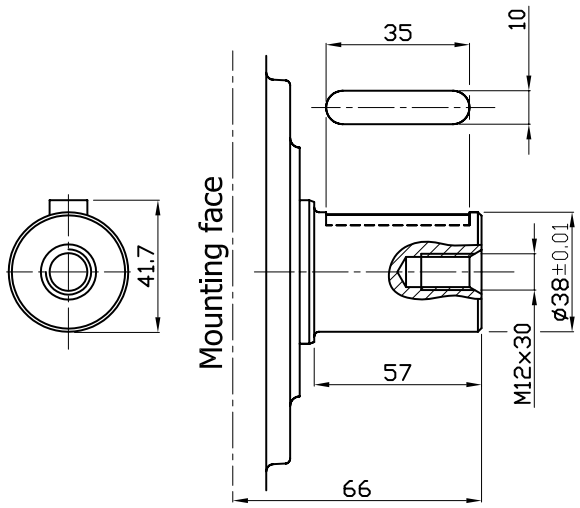
SIZE

IAM 200-250-300-350-400-500-600/PH H2



SHAFT

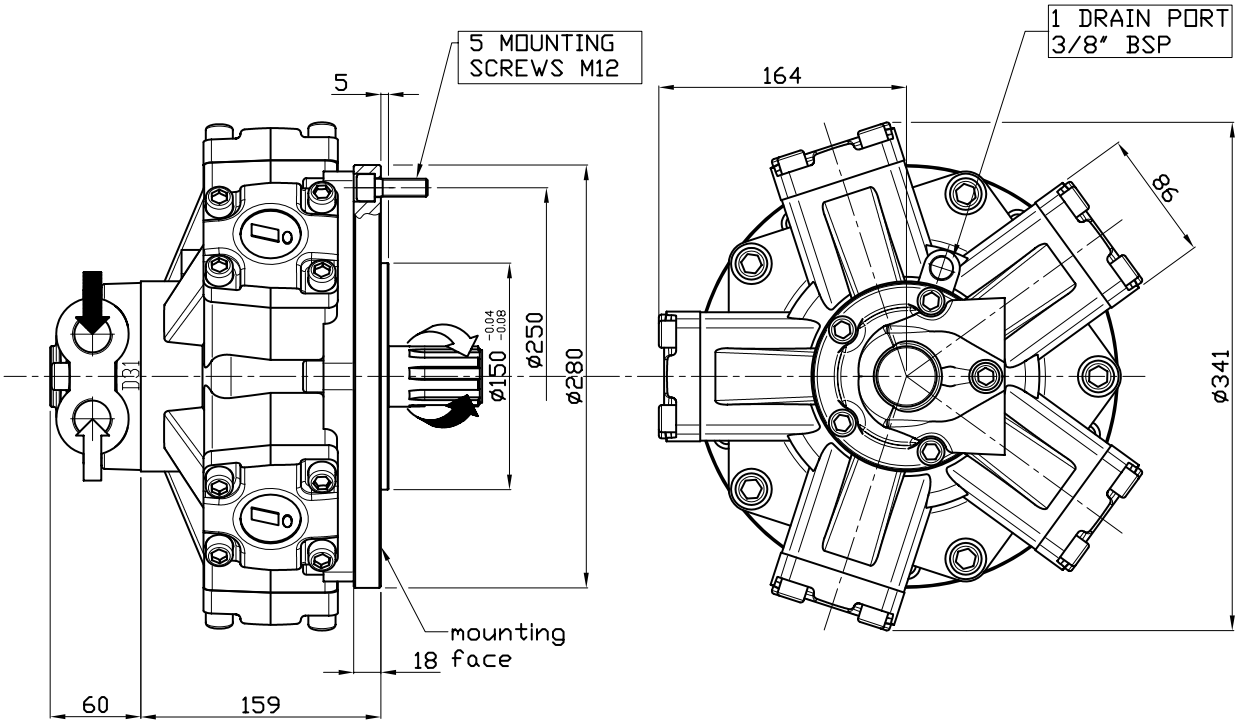
IAM 200-250-300-350-400-500-600/PH H2

A0: Standard splined shaft	A2: Parallel shaft on request
	

INTERCHANGEABLE WITH GM2

SIZE

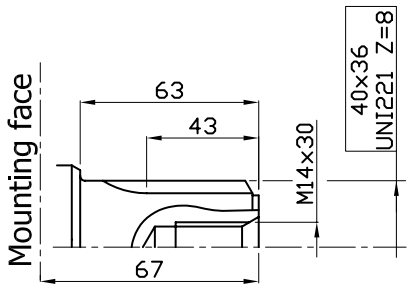
IAM 200/GM2 250/GM2 300/GM2 350/GM2 400/GM2 500/GM2 600/GM2 H2



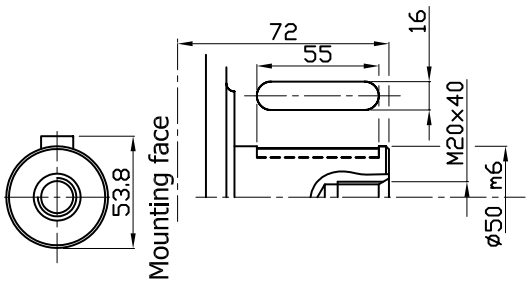
SHAFT

IAM 200/GM2 250/GM2 300/GM2 350/GM2 400/GM2 500/GM2 600/GM2 H2

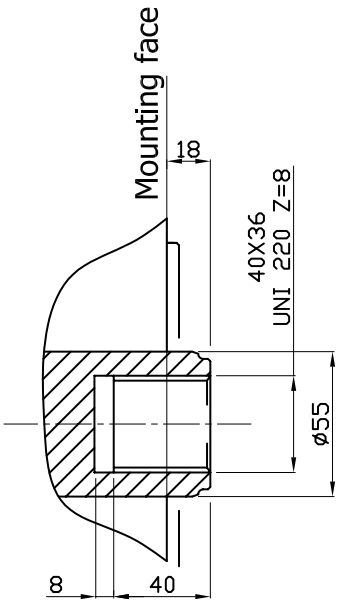
A0: Standard splined shaft



A2: Parallel shaft on request



A3: Female shaft on request

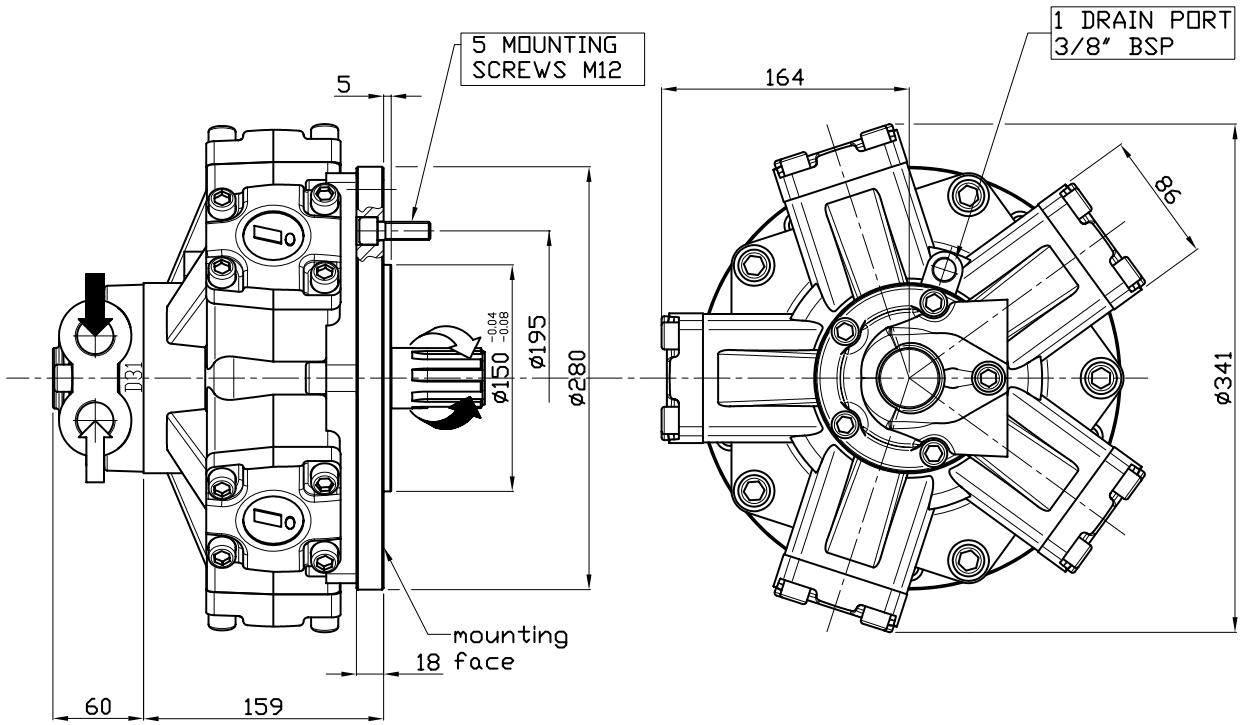


MTCP SERIES AVAILABLE ON REQUEST

SIZE

INTERCHANGEABLE WITH M2

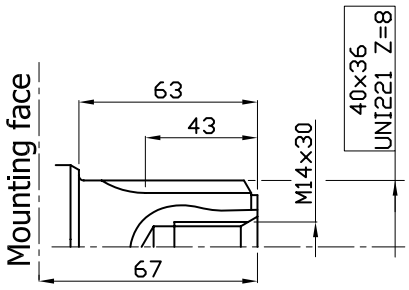
IAM 200/S 250/S 300/S 350/S 400/S 500/S 600/S H2



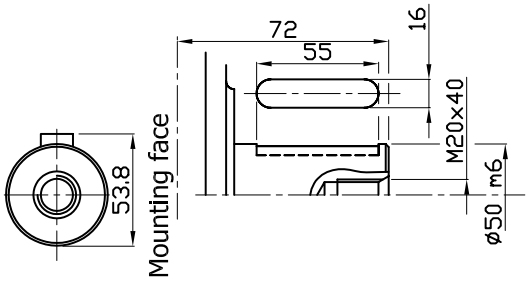
SHAFT

IAM 200/S 250/S 300/S 350/S 400/S 500/S 600/S H2

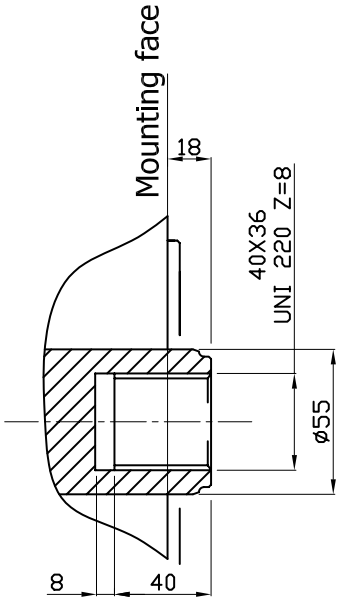
A0: Standard splined shaft



A2: Parallel shaft on request



A3: Female shaft on request



MTCP SERIES AVAILABLE ON REQUEST

ORDERING INSTRUCTIONS

Motor model
IAM

Displacement

Interchangeability

- /C (190/C, 300/C)
- /B10 (200/B10)
- /PH
- /GM2
- /S

Housing

Shaft

- A0 standard splined shaft
- A1 special splined shaft
- A2 parallel keyed shaft
- A3 special female shaft
- A.. other shaft

Distributor

- D31 (3/4" BSP)
- D310 (1" BSP)
- D40 (1" BSP)

BSP THREAD CONFIGURATIONS

- D47 SAE CONFIGURATIONS

Tachometer

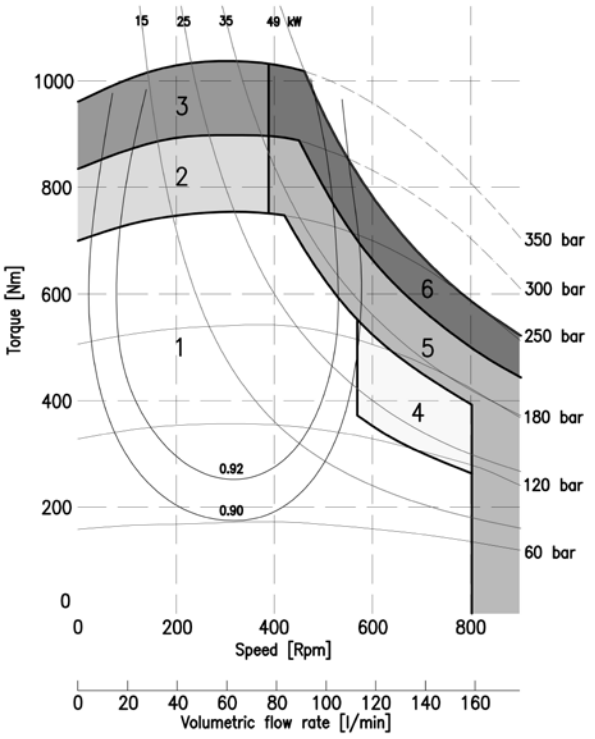
- TA
- TB
- EST
- EST.30
- J TACHOMETER PREDISPOSITION

Spline billet

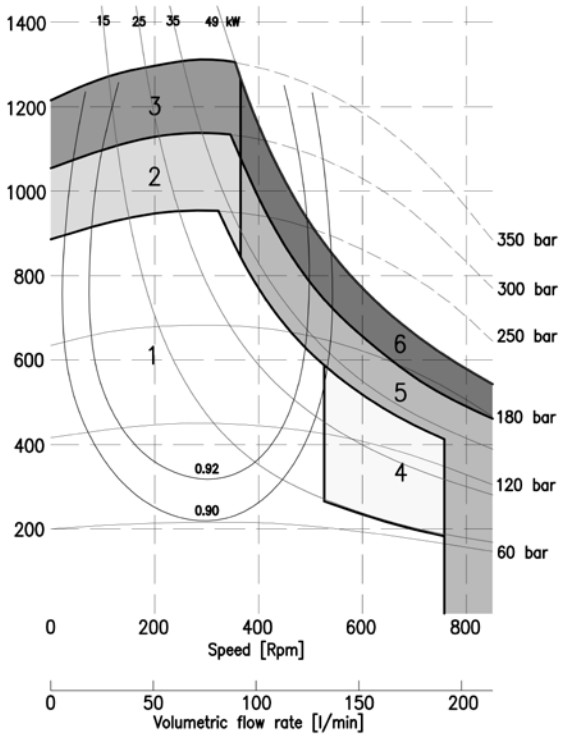
- SB2 32x38 UNI 221
- SB3 36x42 UNI 221
- SB15 42x48 UNI 222

EXAMPLE:
IAM.200.H2.A0.D40
IAM.190/C.H2.A0.D47.J
IAM.200/B10.H2.A0.D31.TA

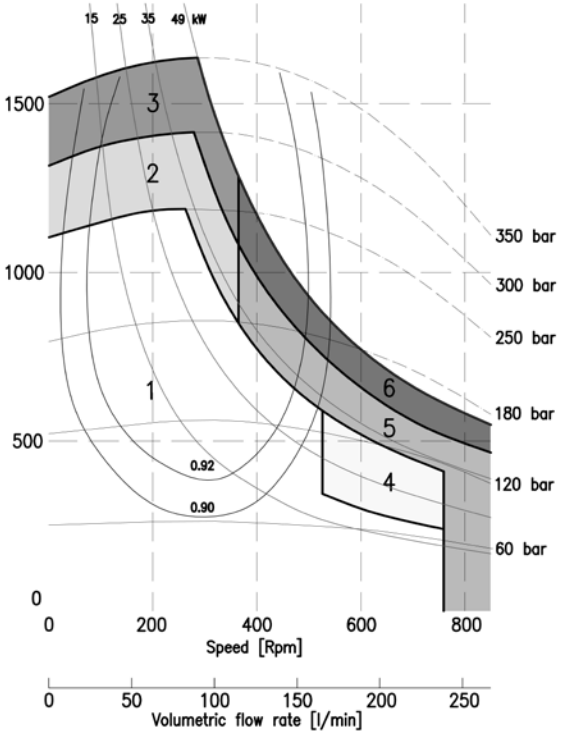
IAM 200 H2



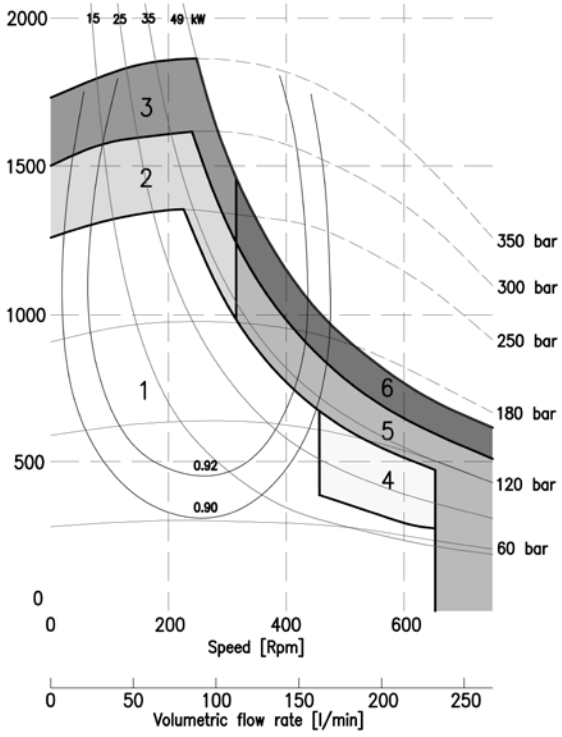
IAM 250 H2



IAM 300 H2

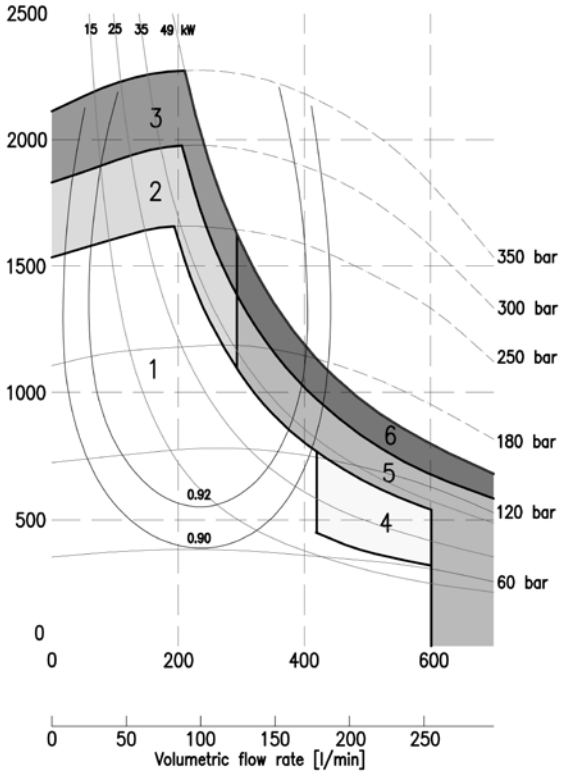


IAM 350 H2

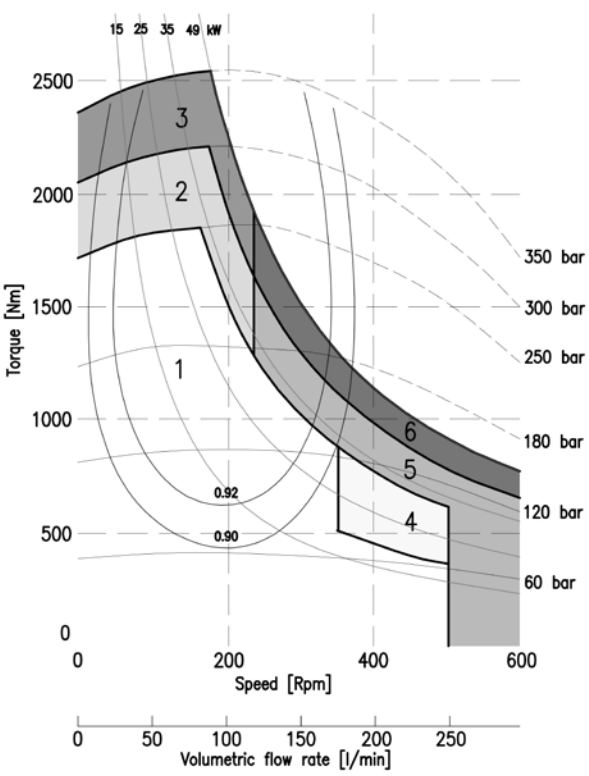


1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

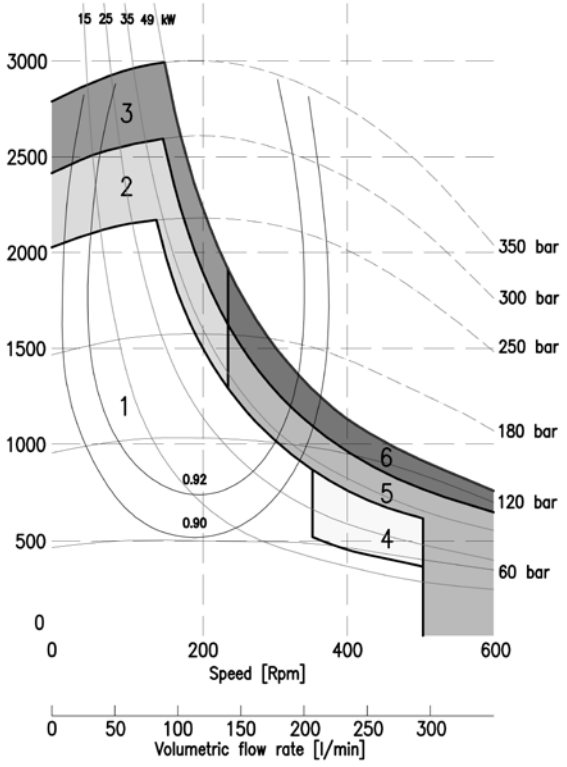
IAM 400 H2



IAM 500 H2



IAM 600 H2



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

Italgroup®
HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H3 MODEL

IAM 350-400-450-500
600-650-700 H3

IAM 450/C H3

IAM 450/B30 H3

IAM 800 H3

IAM 800/N H3

IAM 400-450-500
600-700/GM3 H3

IAM 400-450-500
600-700/S H3

INDEX

TECHNICAL DATA H3

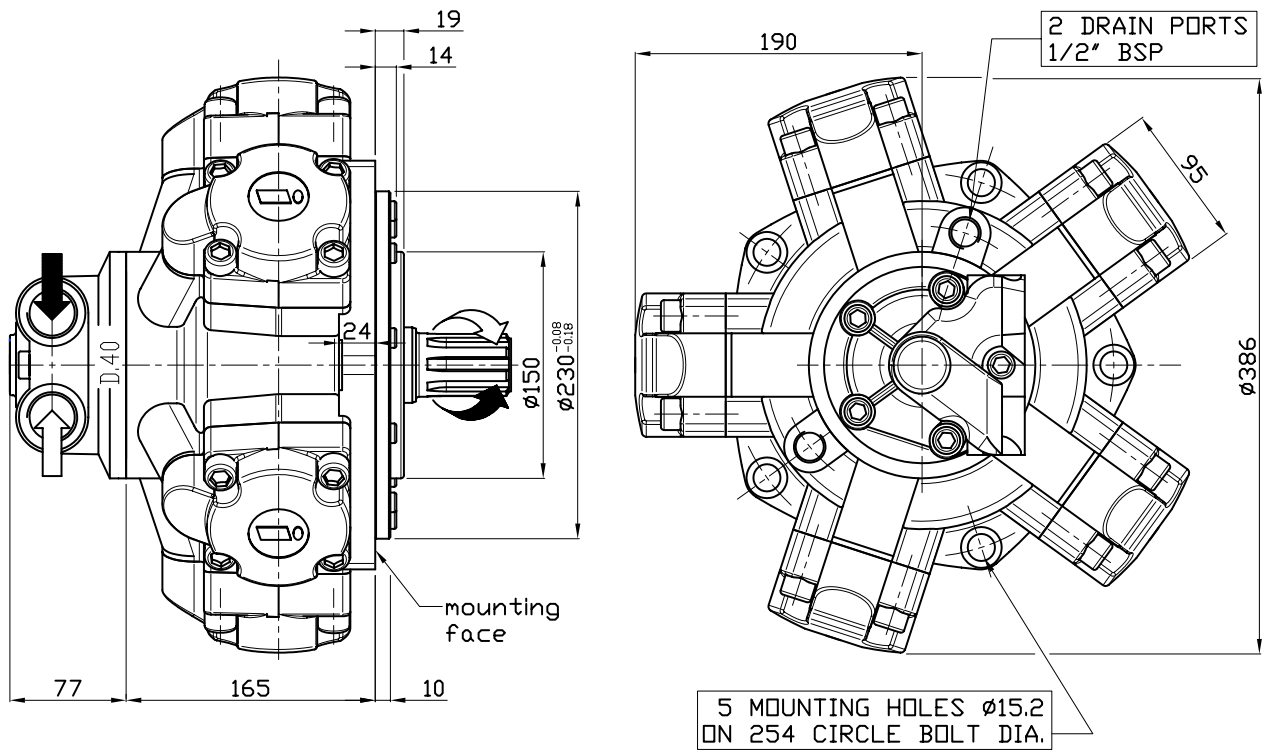
MODEL		IAM 350 H3	IAM 400 H3	IAM 450 H3	IAM 500 H3	IAM 600 H3	IAM 650 H3	IAM 700 H3	IAM 800 H3
Displacement	cc/rev	349	397	452	491	594	660	707	791
Specific Torque	Nm/bar	5.6	6.3	7.2	7.8	9.4	10.5	11.2	12.6
Max cont. Pressure	bar	250	250	250	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350	350	350	350
Max continuous speed	rpm	630	600	600	600	550	500	450	400
Peak speed	rpm	700	680	680	680	630	580	500	450
Max continuous power	HP	63	63	63	63	63	63	63	63
	kW	45	45	45	45	45	45	45	45
Max power	HP	91	91	91	91	91	91	91	91
	kW	68	68	68	68	68	68	68	68

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 68 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 1 rpm
- Flushing flow(*): IAM H3 350 – 400 – 450 – 500 8 l/min
  IAM H3 600 – 650 – 700 - 800 10 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

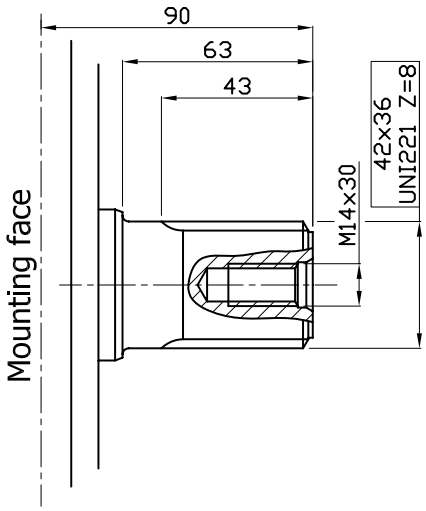
IAM 350-400-450-500-600-650-700 H3



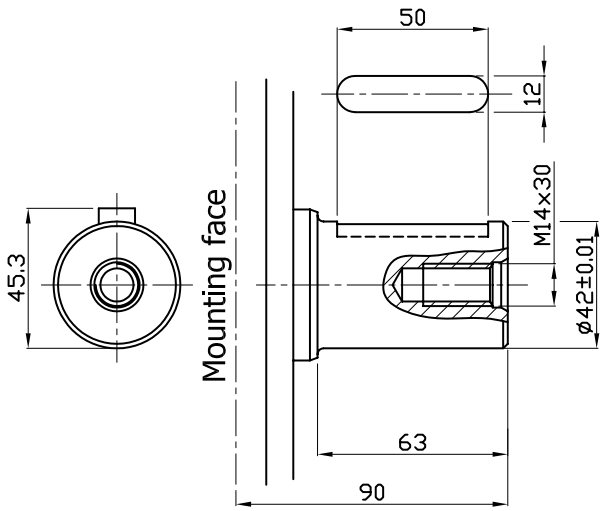
SHAFT

IAM 350-400-450-500-600-650-700 H3

A0: Standard splined shaft



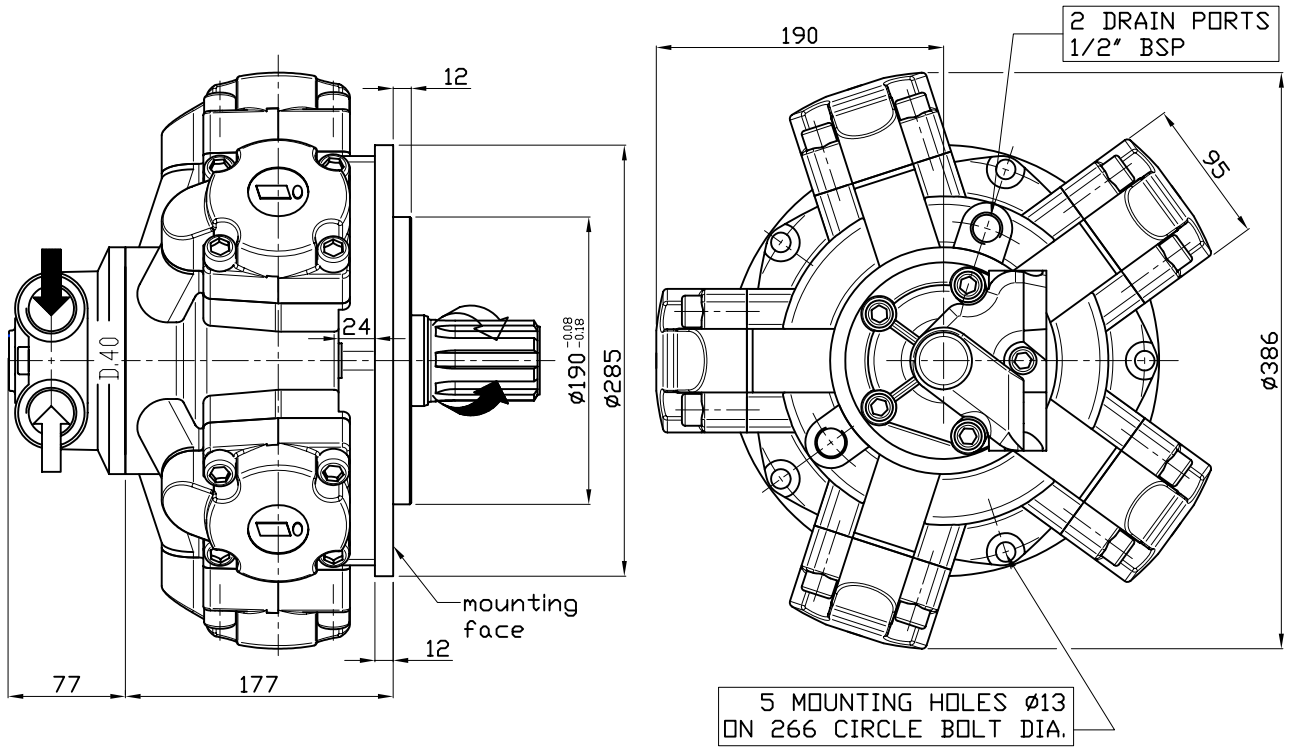
A2: Parallel shaft on request



IAM 350 H3 A0 AVAILABLE ON REQUEST

SIZE

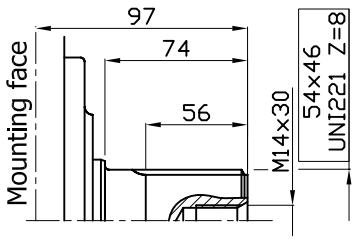
IAM 450/C H3



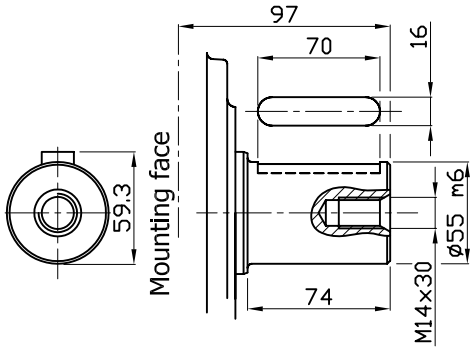
SHAFT & OPTION

IAM 450/C H3

A1: Standard splined shaft

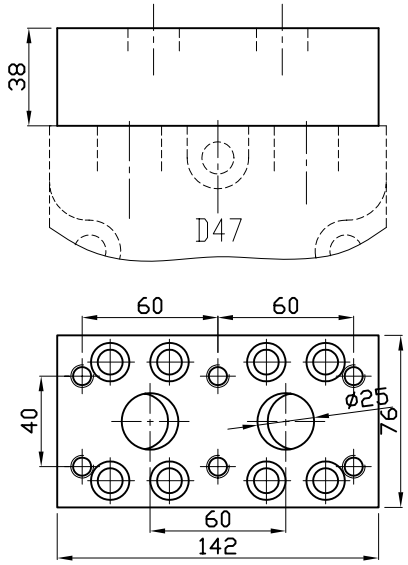


A2: Parallel shaft on request



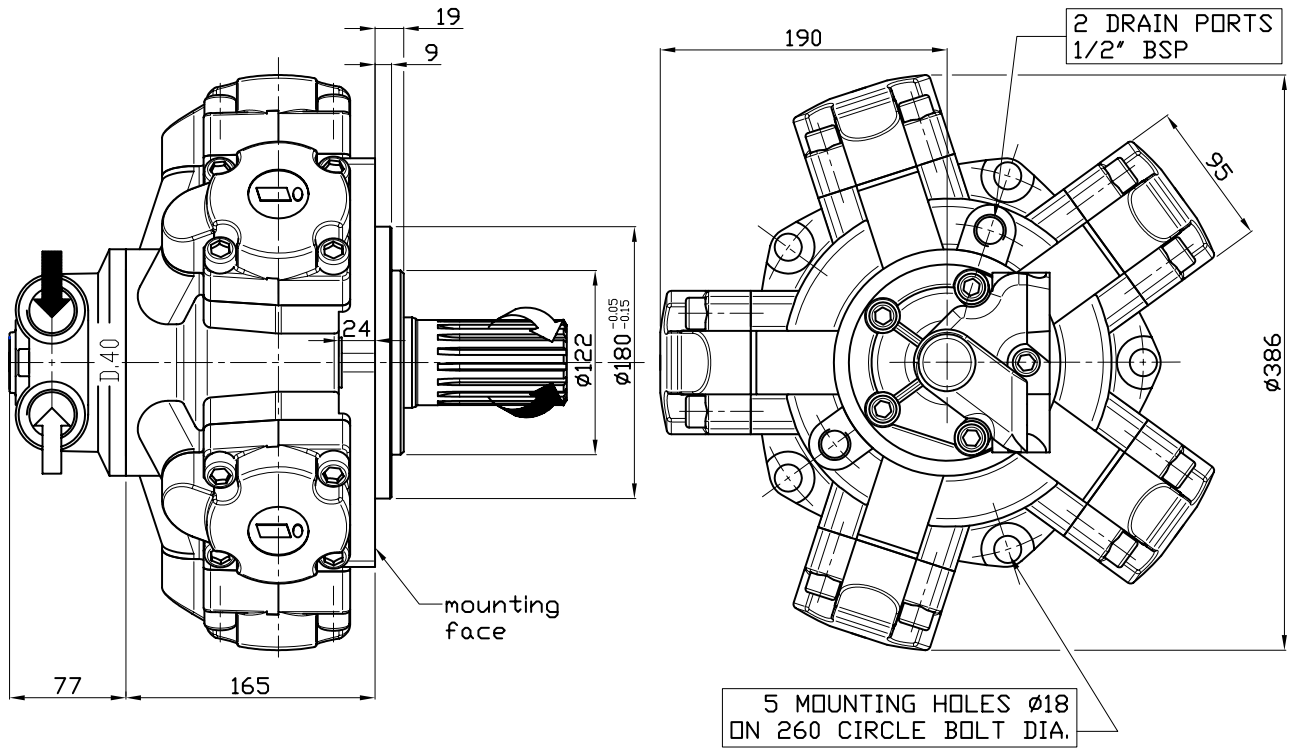
FL2: connection block

Connection block, fitting D47 distributor, for motor MR 350/450/500/600/700/800



SIZE

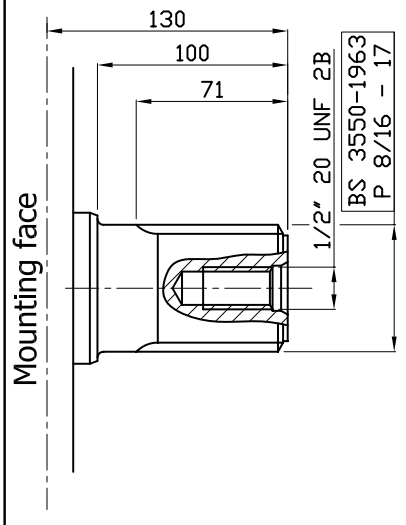
IAM 450/B30 H3



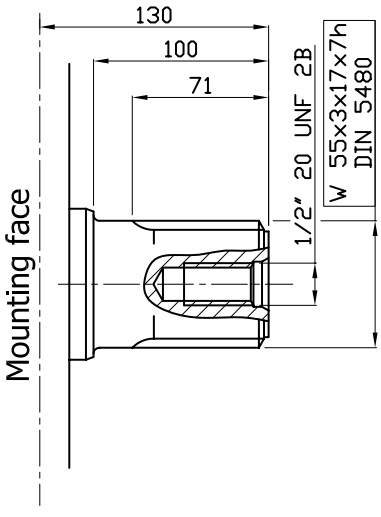
SHAFT

IAM 450/B30 H3

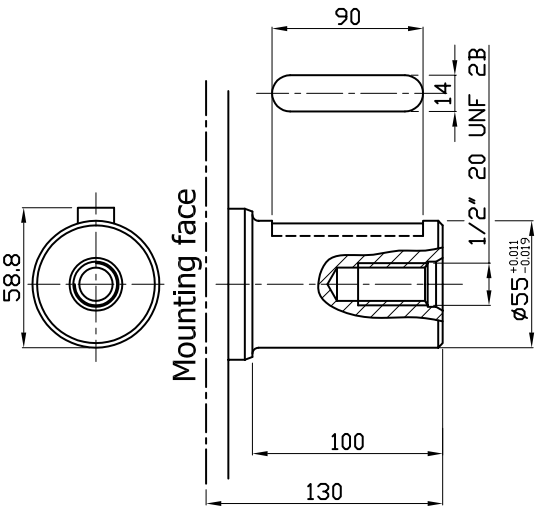
A0: Standard splined shaft



A1: Splined shaft on request

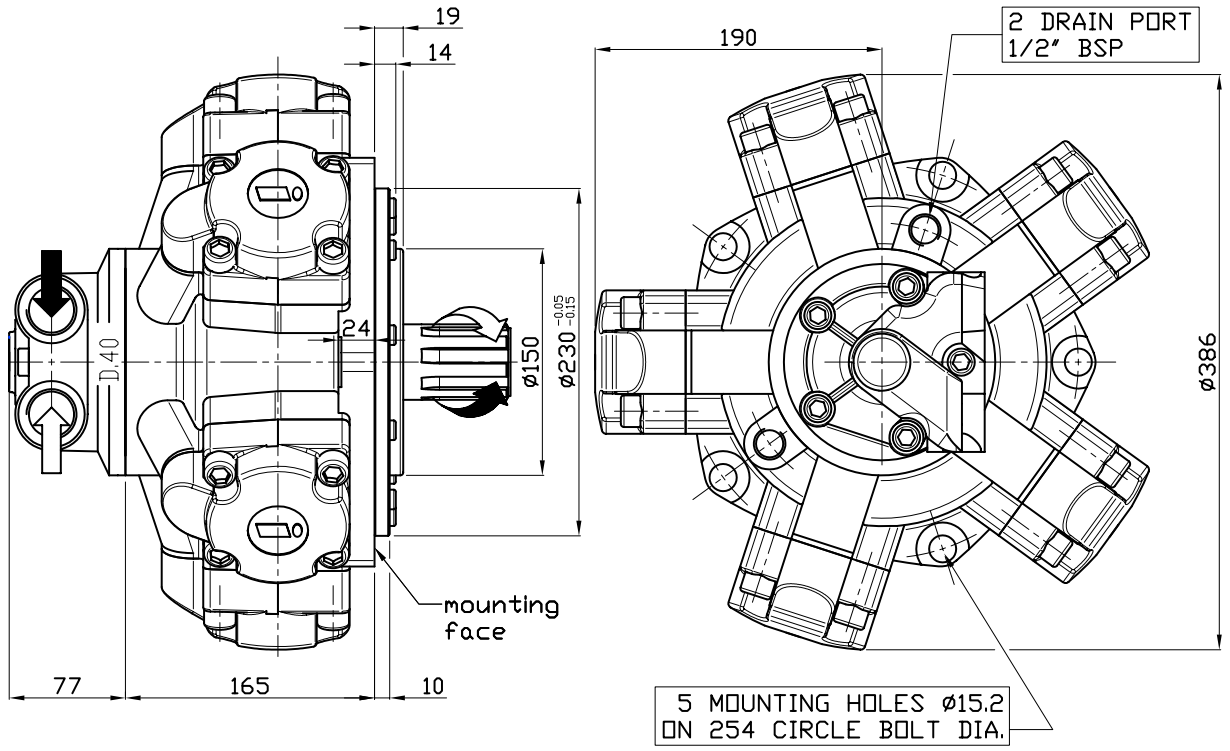


A2: Parallel shaft on request



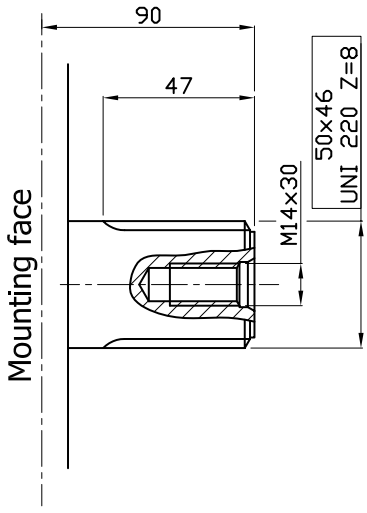
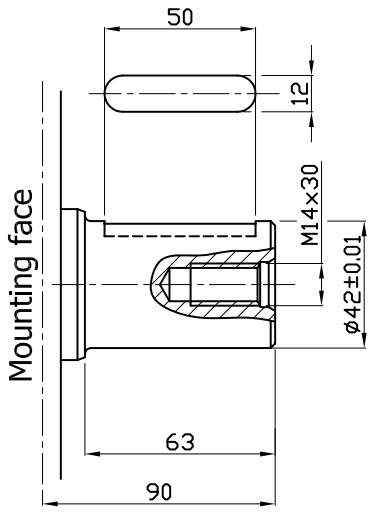
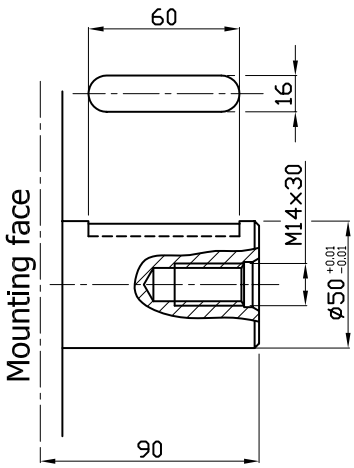
SIZE

IAM 800 H3



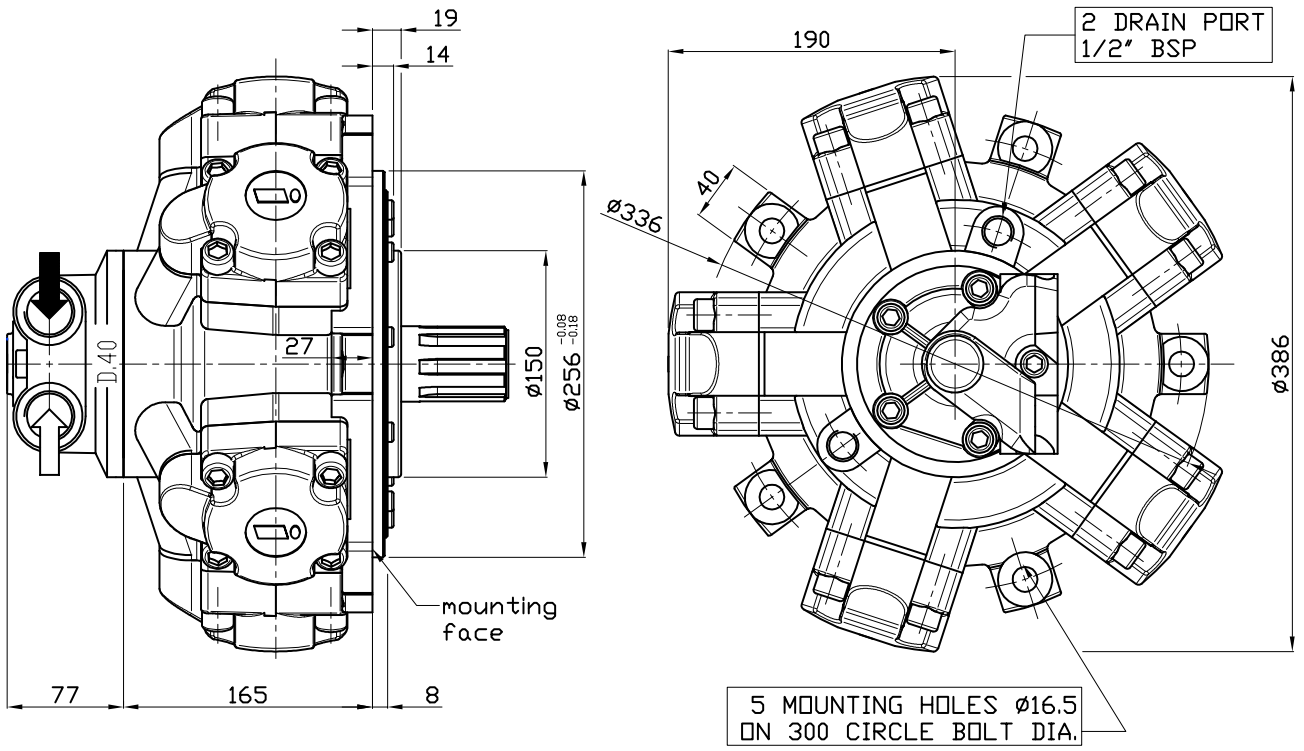
SHAFT

IAM 800 H3

A0: Standard splined shaft	A2: Parallel shaft on request	A22: Parallel shaft on request
		

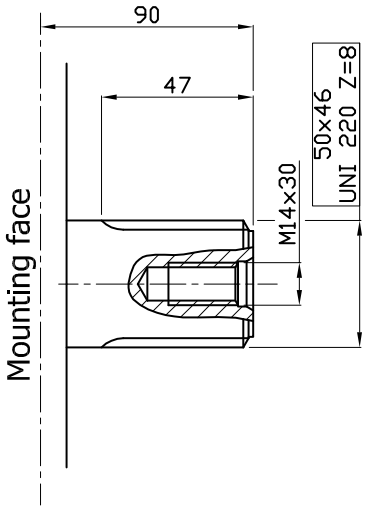
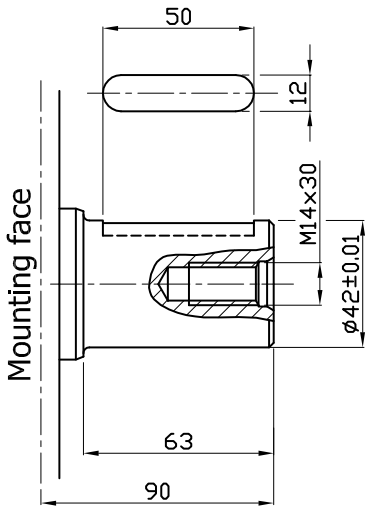
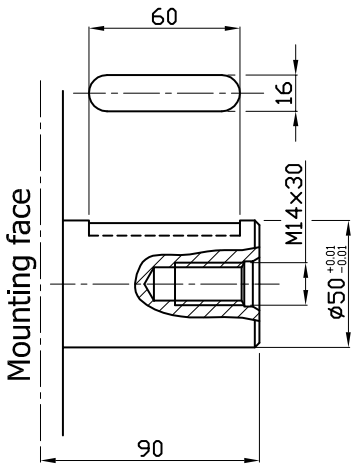
SIZE

IAM 800/N H3



SHAFT

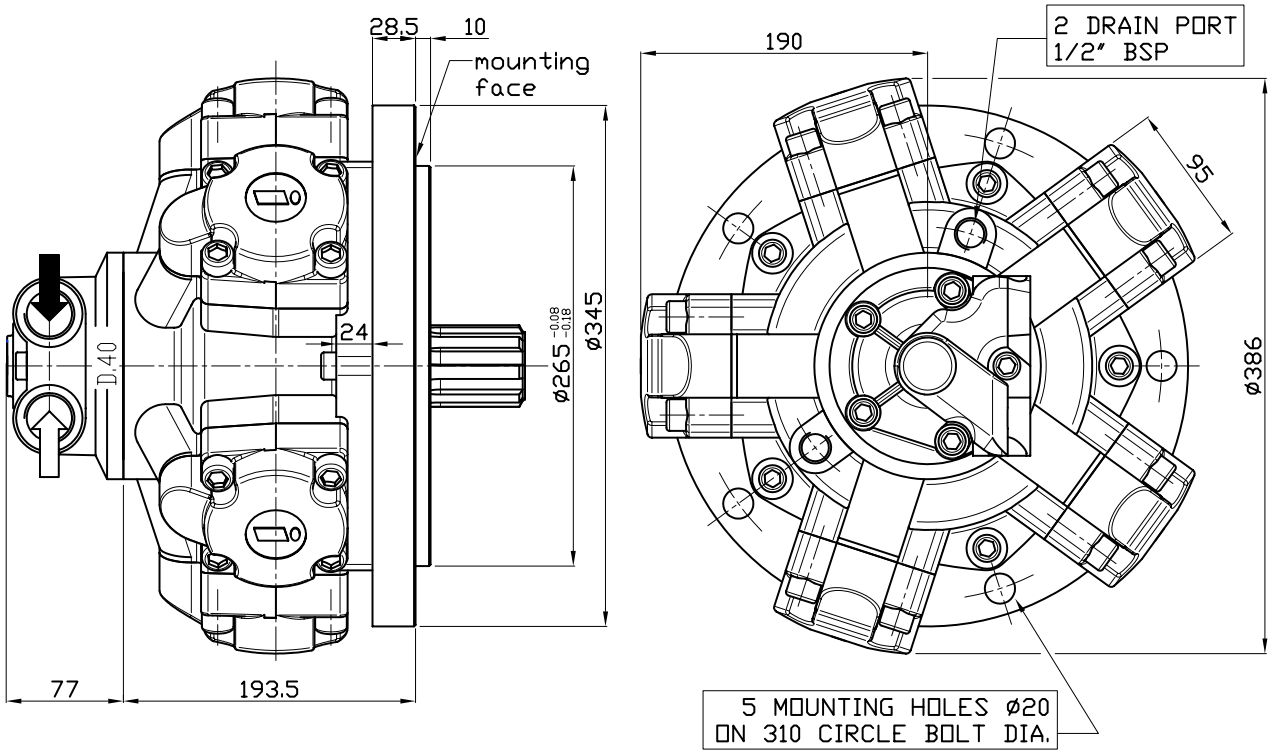
IAM 800/N H3

A1: Standard splined shaft	A2: Parallel shaft on request	A22: Parallel shaft on request
		

INTERCHANGEABLE WITH GM3

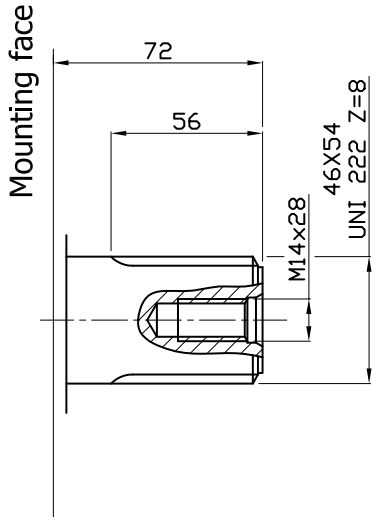
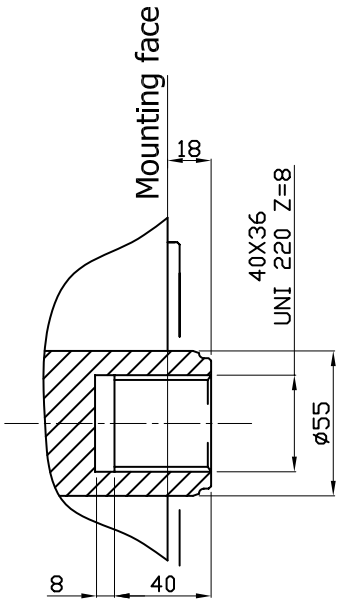
SIZE

IAM 400/GM3 450/GM3 500/GM3 600/GM3 700/GM3 H3



SHAFT

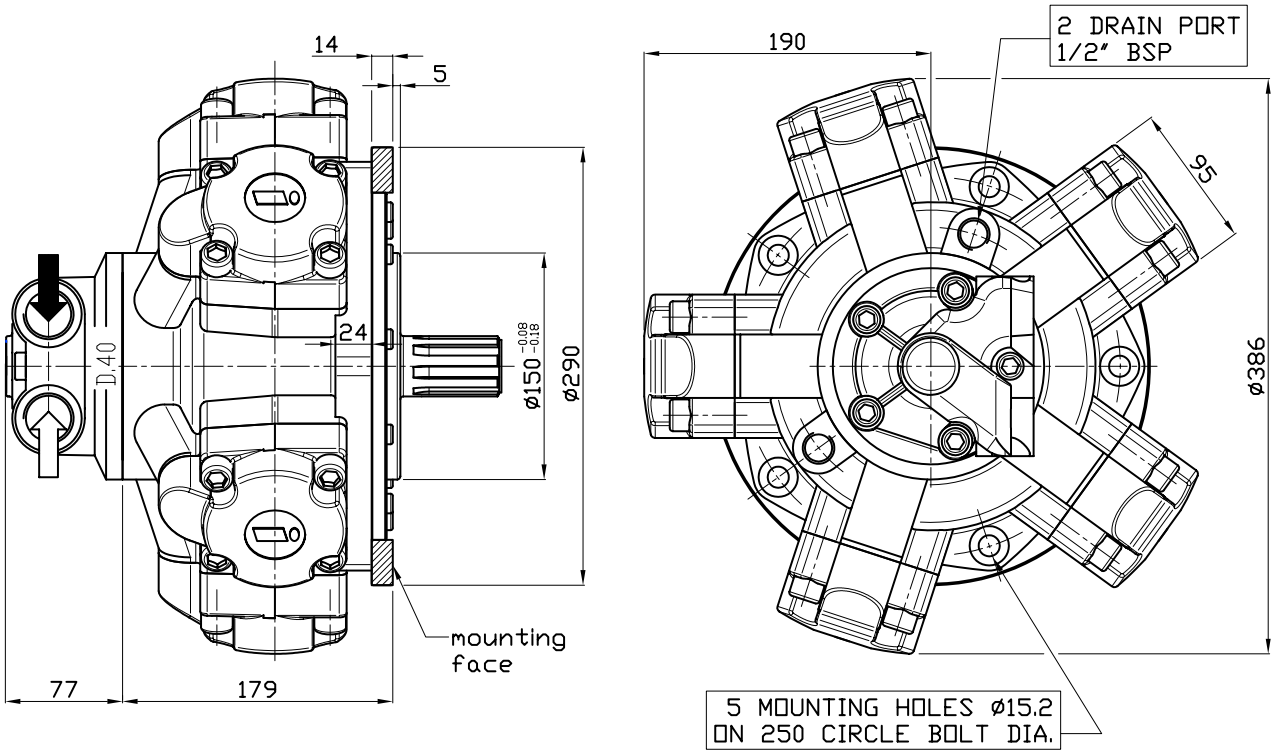
IAM 400/GM3 450/GM3 500/GM3 600/GM3 700/GM3 H3

A0: Standard splined shaft	A3: Female shaft on request
	

SIZE

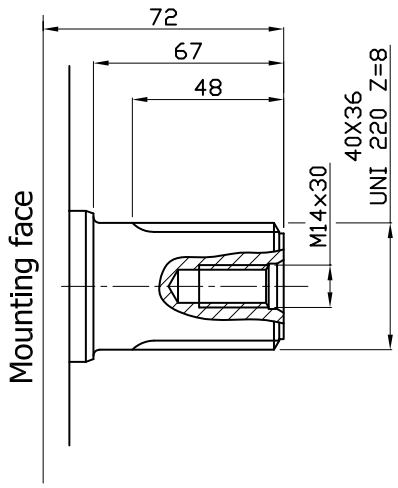
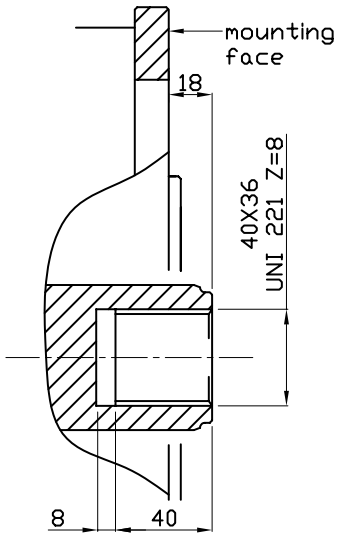
INTERCHANGEABLE WITH M3

IAM 400/S 450/S 500/S 600/S 700/S H3

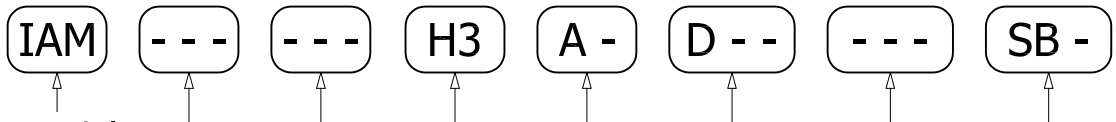


SHAFT

IAM 400/S 450/S 500/S 600/S 700/S H3

A0: Standard splined shaft	A3: Female shaft on request
	

ORDERING INSTRUCTIONS



Motor model
IAM

Displacement

Interchangeability

- /C (450/C)
- /B30 (450/B30)
- /N
- /GM3
- /S

Housing

Shaft

- A0 standard splined shaft
- A1 special splined shaft
- A2 parallel keyed shaft
- A3 special female shaft
- A.. other shaft

Distributor

- D31 (3/4" BSP)
- D310 (1" BSP)
- D40 (1" BSP)

BSP THREAD CONFIGURATIONS

- D47 SAE CONFIGURATIONS

Tachometer

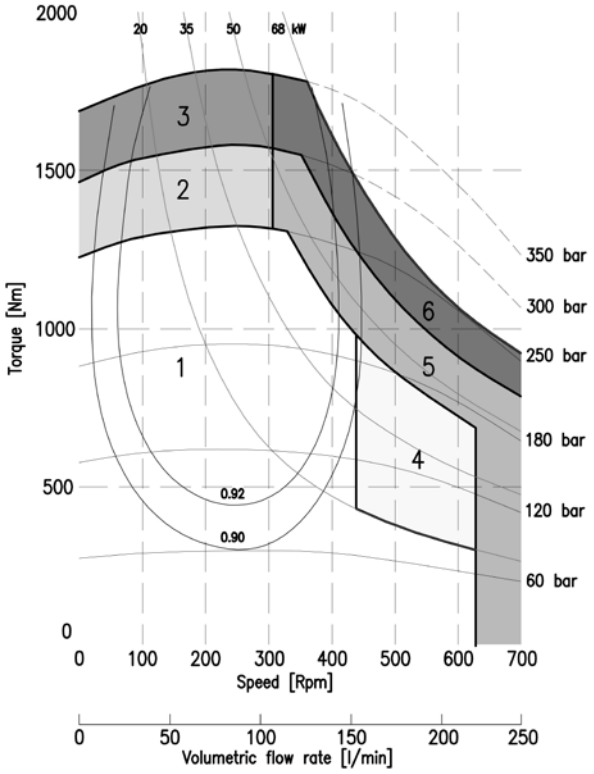
- TA
- TB
- EST
- EST.30
- J TACHOMETER PREDISPOSITION

Spline billet

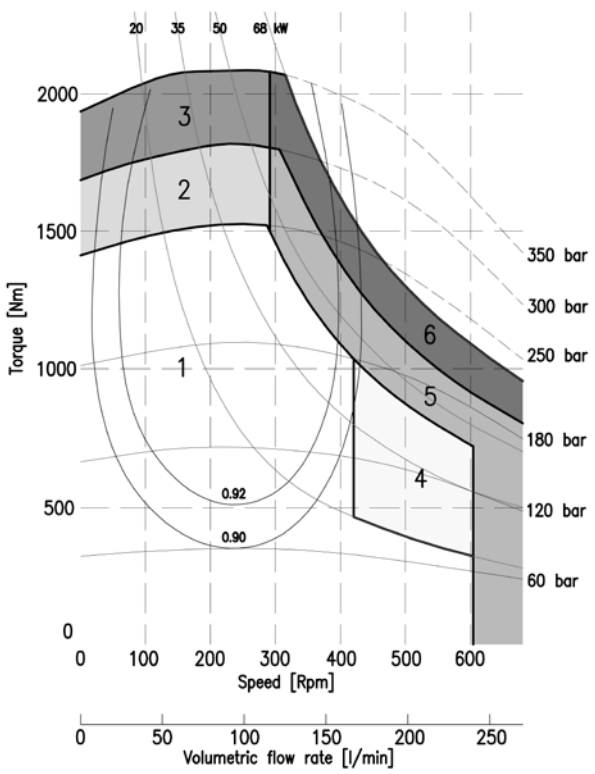
- SB3 36x42 UNI 221
- SB4 46x50 UNI 220
- SB5 46x54 UNI 221

EXAMPLE:
IAM.400.H3.A0.D40
IAM.450/C.H3.A1.D40.J.SB5
IAM.500/GM3.H3.A0.D40.TA.SB5

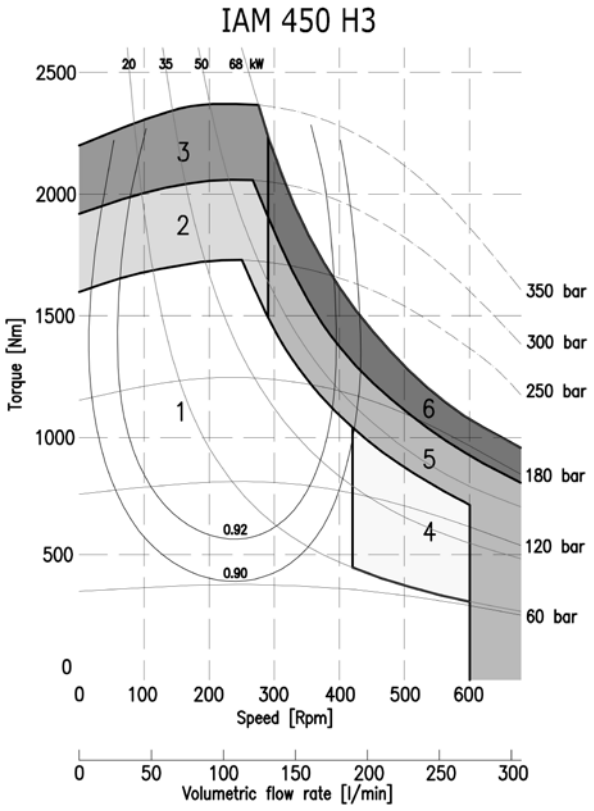
IAM 350 H3



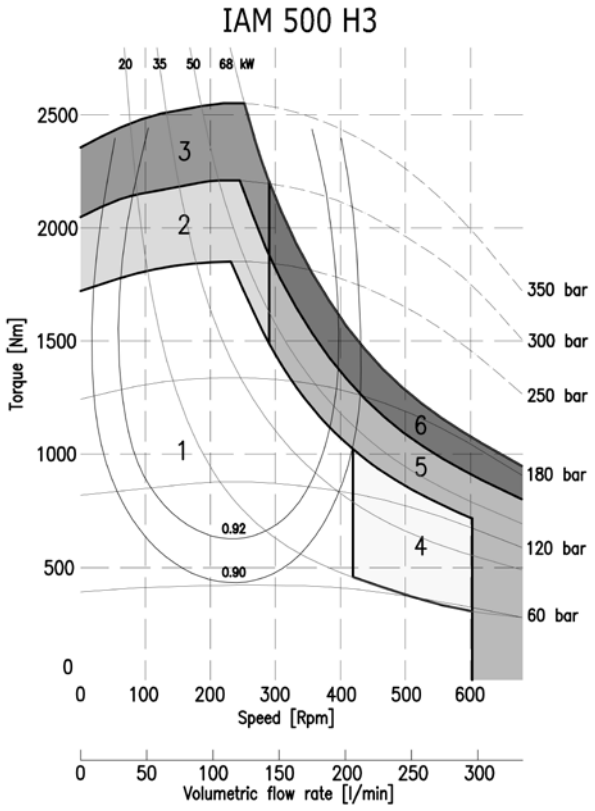
IAM 400 H3



IAM 450 H3

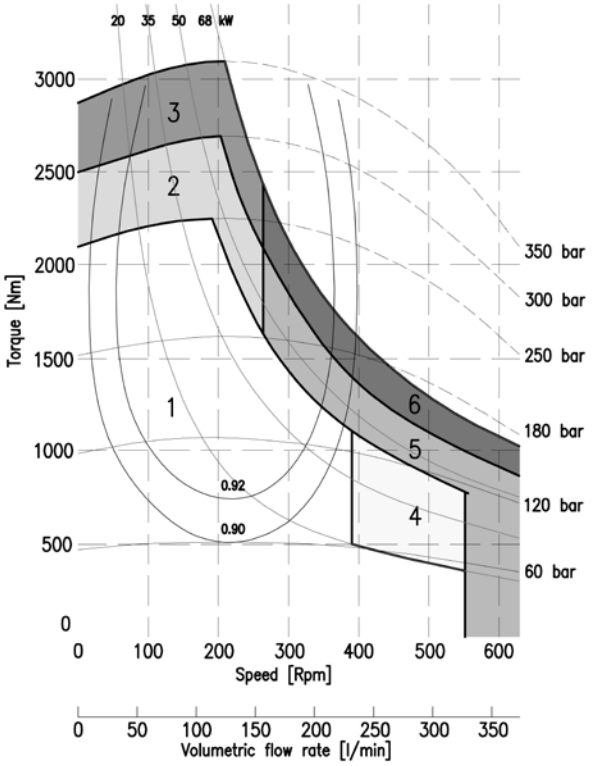


IAM 500 H3

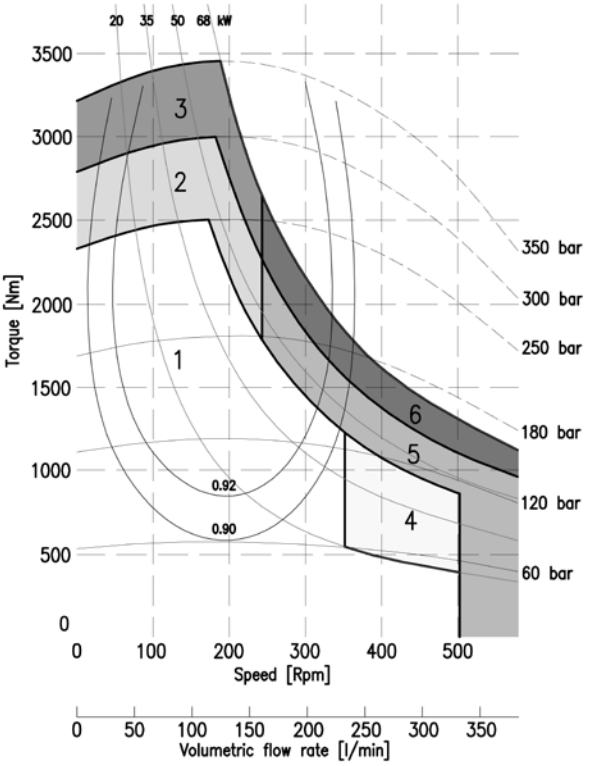


1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

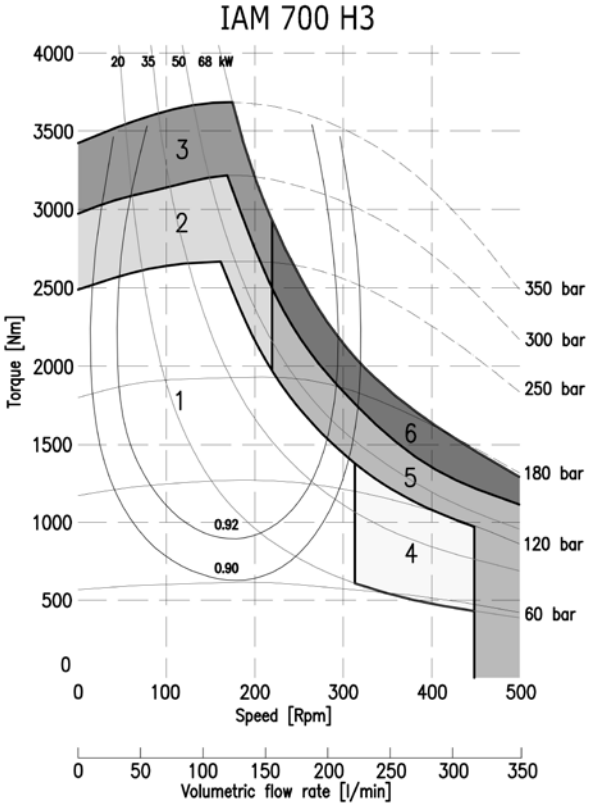
IAM 600 H3



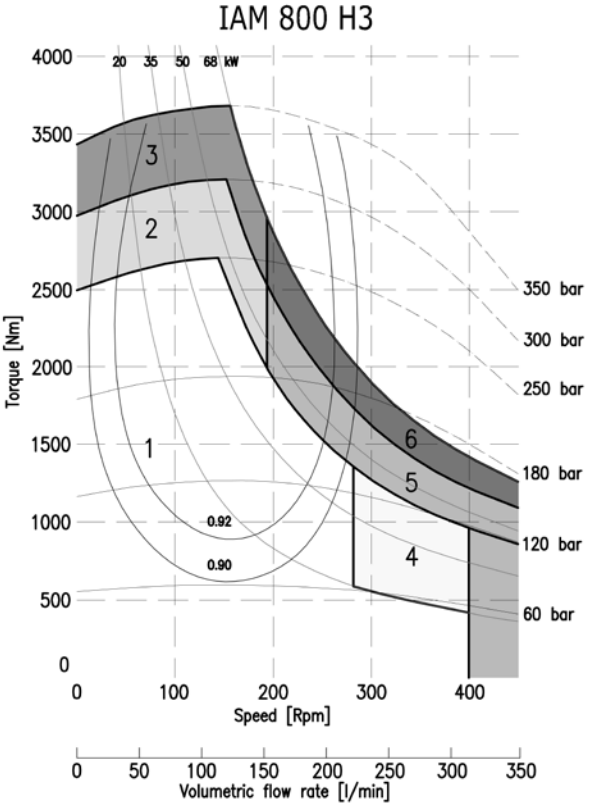
IAM 650 H3



IAM 700 H3



IAM 800 H3



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

Italgroup®
HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H4 MODEL

IAM 700-800-850-900
1000-1100-1200
1250-1400 H4

IAM 700/C-800/C H4

IAM 800/B45 H4

IAM 700-800-900
1000-1100-1250/S H4

IAM 700-800-900
1000-1100-1250/GM4 H4

INDEX

Italgroup®
HYDRAULIC MOTORS
ITALY

TECHNICAL DATA H4

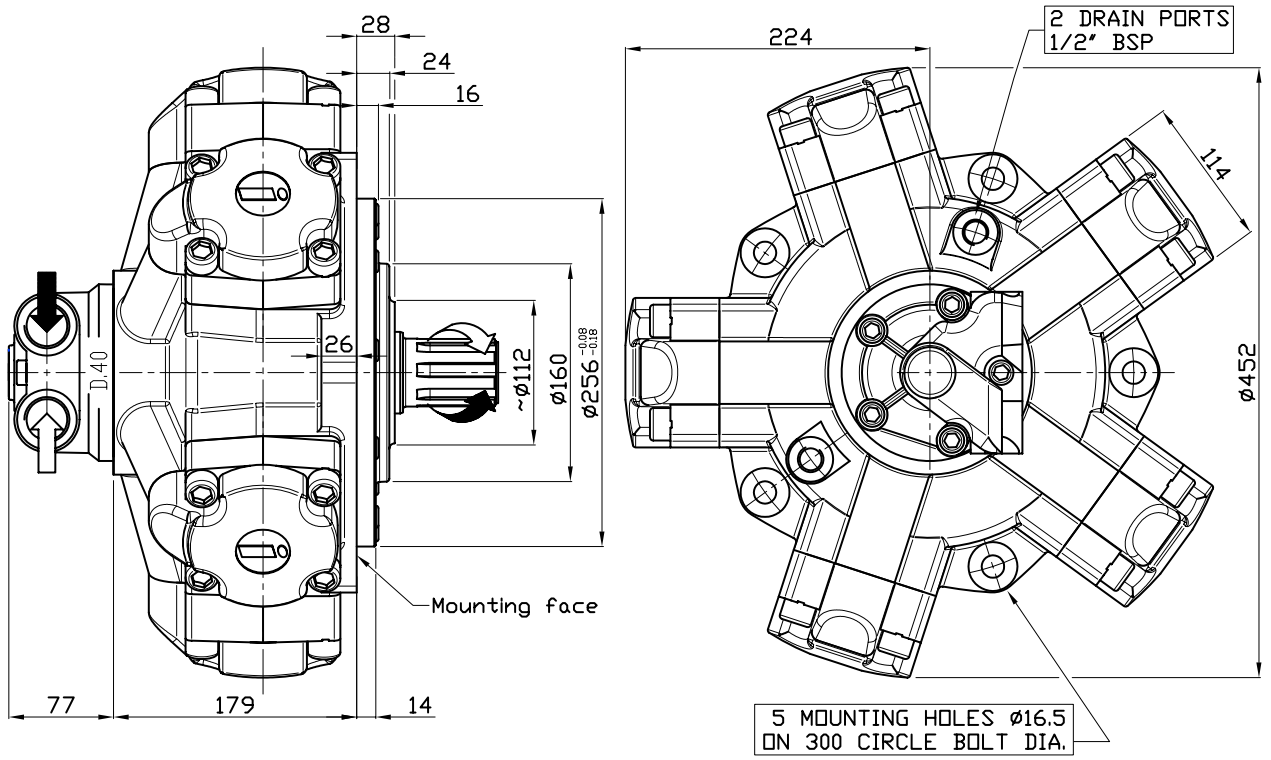
MODEL		IAM 700 H4	IAM 800 H4	IAM 850 H4	IAM 900 H4	IAM 1000 H4	IAM 1100 H4	IAM 1200 H4	IAM 1250 H4	IAM 1400 H4
Displacement	cc/rev	714	792	847	904	992	1116	1192	1247	1332
Specific Torque	Nm/bar	11.4	12.6	13.5	14.4	15.8	17.8	19.0	19.8	21.2
Max cont. Pressure	bar	250	250	250	250	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350	350	350	350	350
Max continuous speed	rpm	500	450	450	450	330	330	300	250	200
Peak speed	rpm	580	530	530	530	400	400	350	300	250
Max continuous power	HP	75	75	75	75	75	75	75	75	75
	kW	55	55	55	55	55	55	55	55	55
Max power	HP	107	107	107	107	107	107	107	107	107
	kW	80	80	80	80	80	80	80	80	80

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 92 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 1 rpm
- Flushing flow(*): IAM H4 700 – 800 – 850 – 900 10 l/min
  IAM H4 1000 – 1100 – 1200 – 1250 10 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

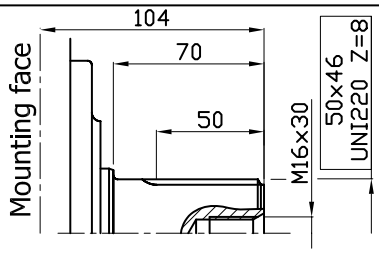
IAM 700-800-850-900-1000-1100-1200-1250-1400 H4



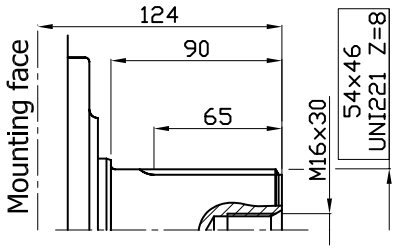
SHAFT

IAM 700-800-850-900-1000-1100-1200-1250-1400 H4

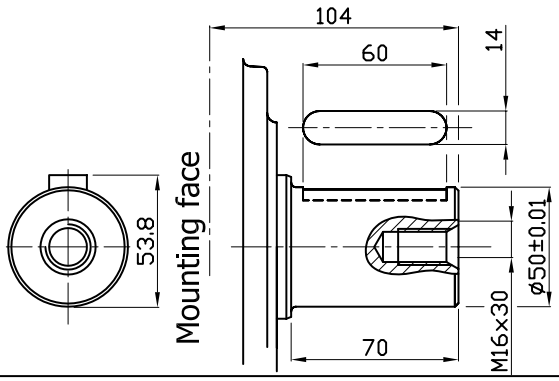
A0: Standard splined shaft



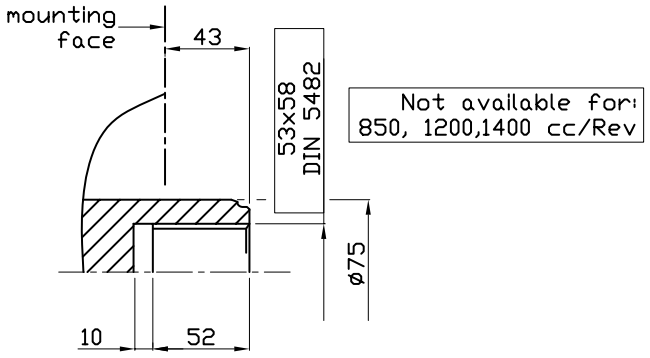
A1: Splined shaft on request



A2: Parallel shaft on request

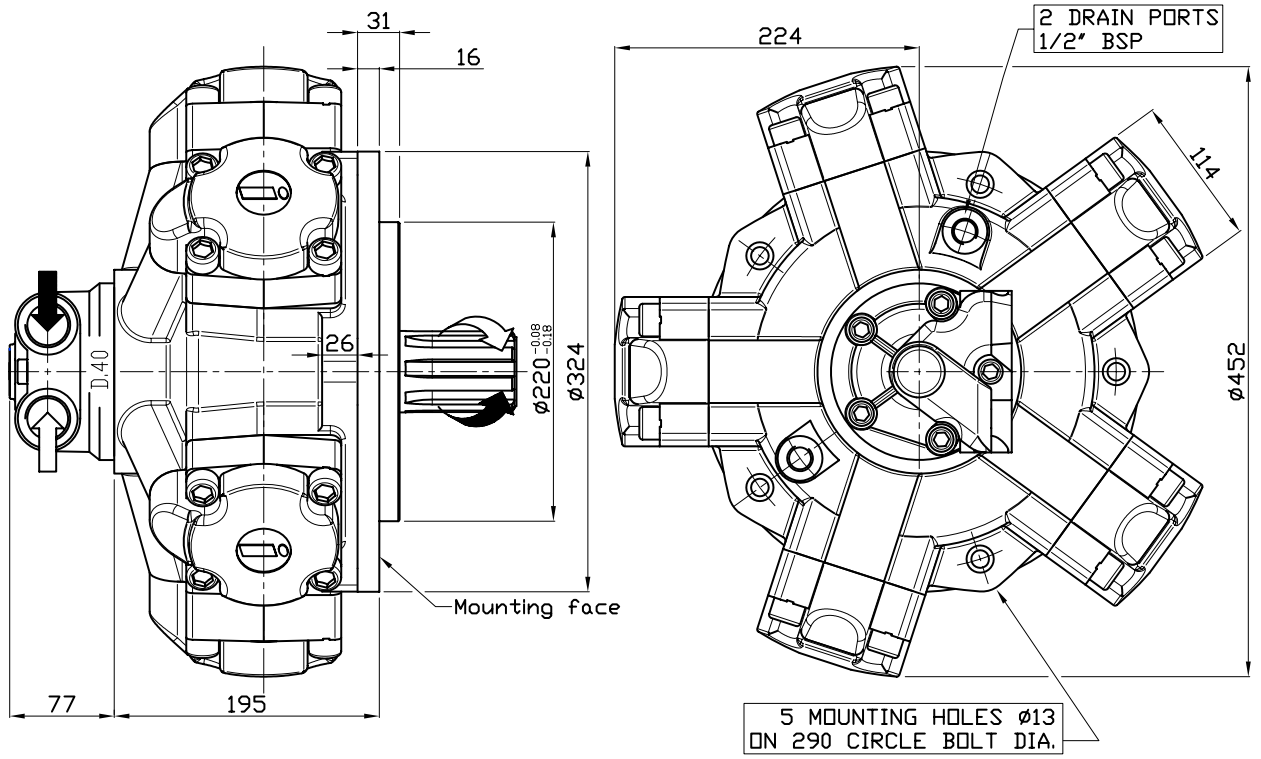


A3: Female shaft on request



SIZE

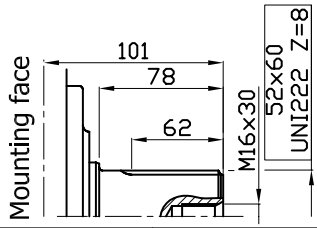
IAM 700/C-800/C H4



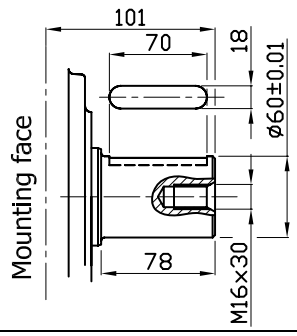
SHAFT & OPTION

IAM 700/C-800/C H4

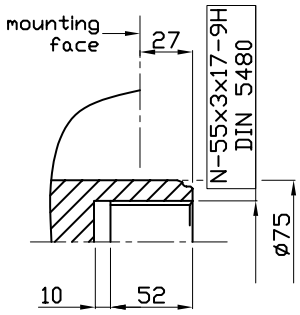
A0: Standard splined shaft



A2: Parallel shaft on request

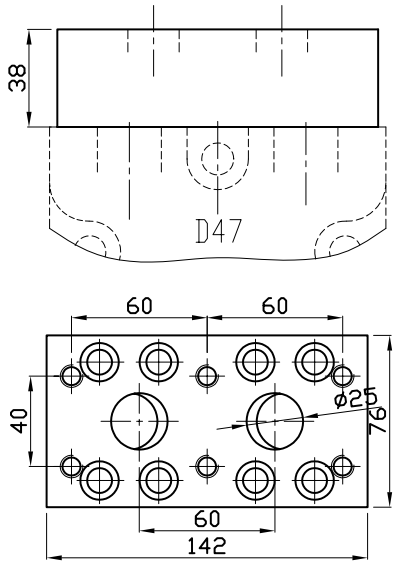


A3: Female shaft on request



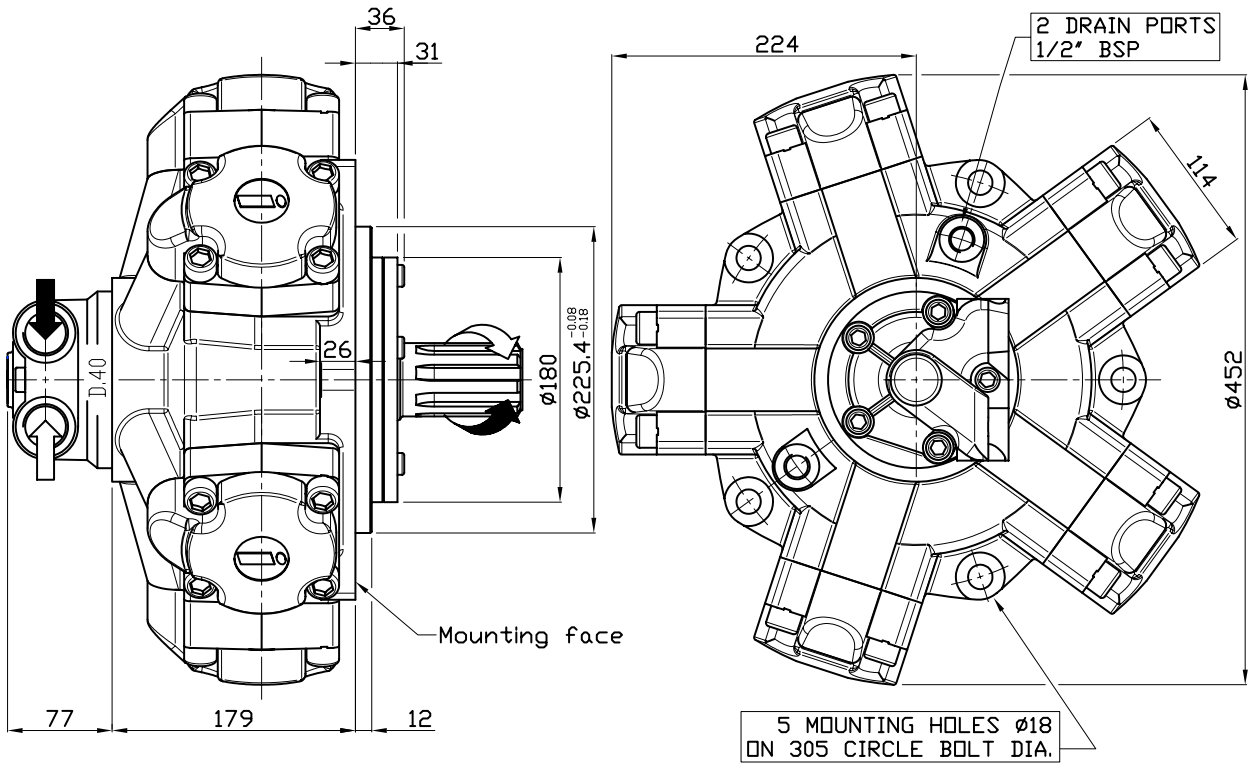
FL2: connection block

Connection block, fitting D47 distributor, for motor MR 350/450/500/600/700/800



SIZE

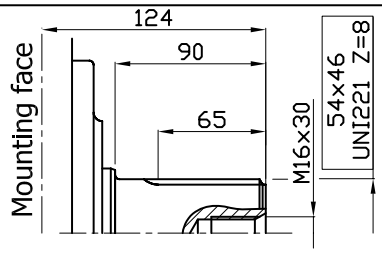
IAM 800/B45 H4



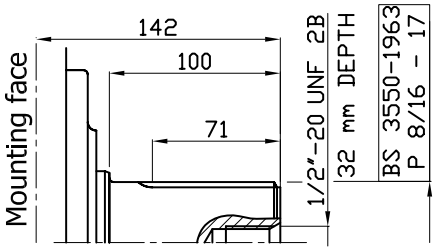
SHAFT

IAM 800/B45 H4

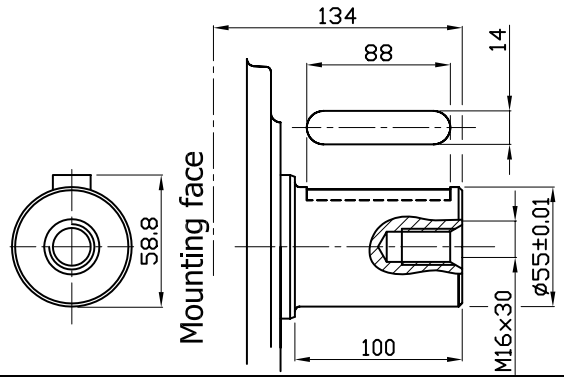
A0: Standard splined shaft



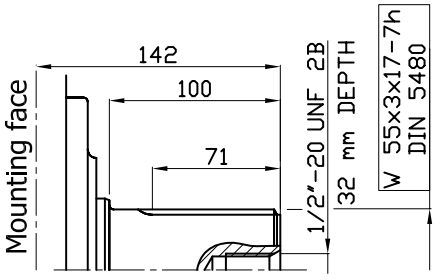
A1: Splined shaft on request



A2: Parallel shaft on request

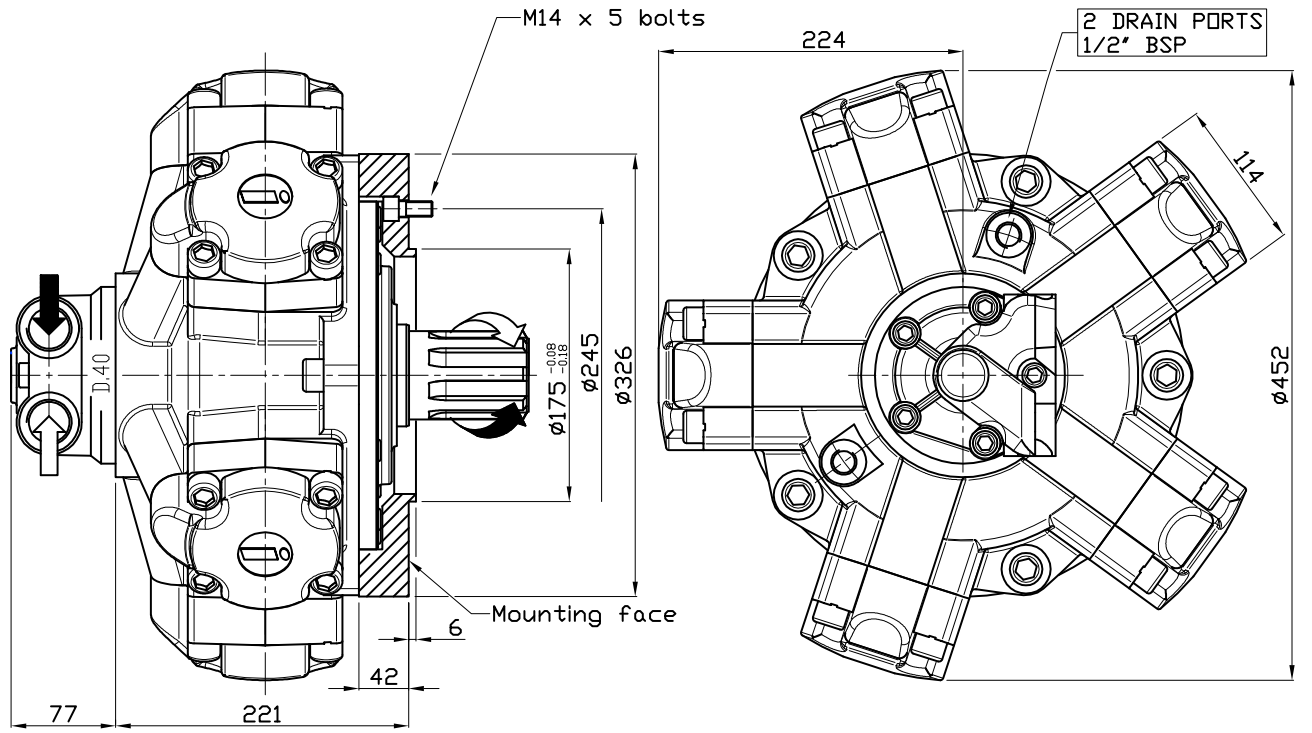


A4: Splined shaft on request



SIZE

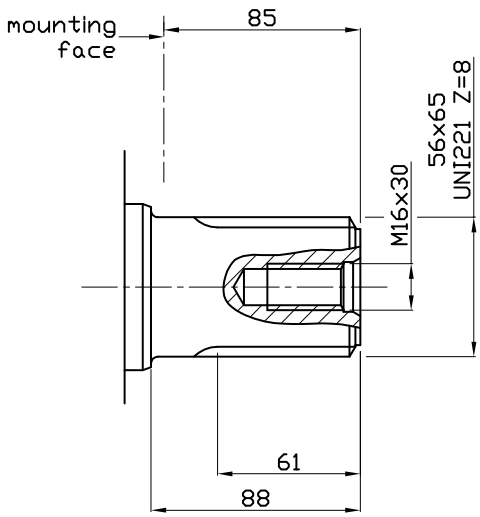
IAM 700/S 800/S 900/S 1000/S 1100/S 1250/S H4



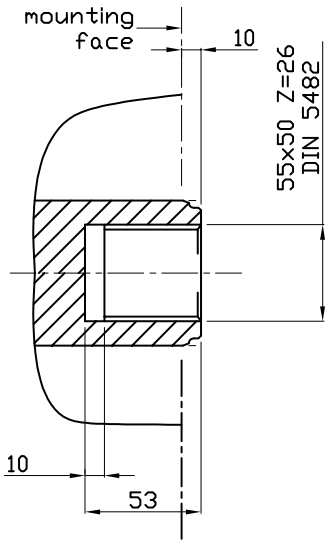
SHAFT

IAM 700/S 800/S 900/S 1000/S 1100/S 1250/S H4

A0: Standard splined shaft

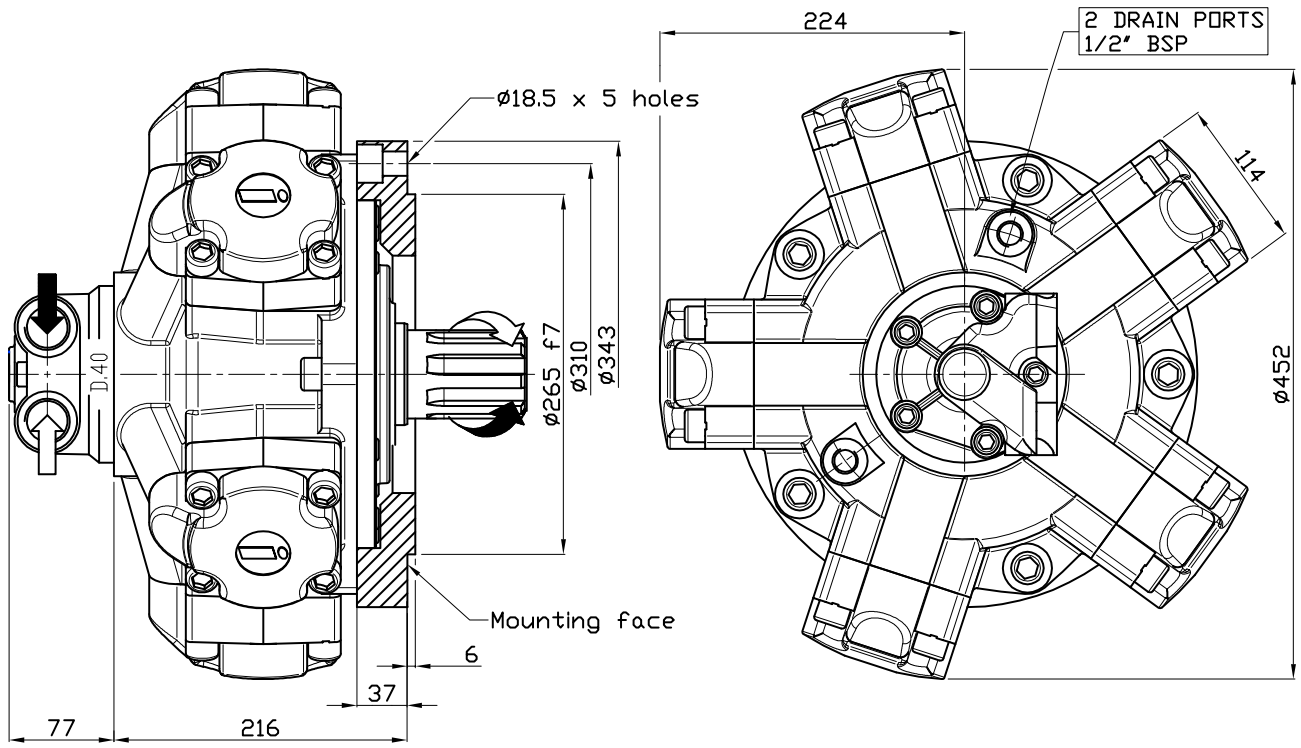


A3: Female shaft on request



SIZE

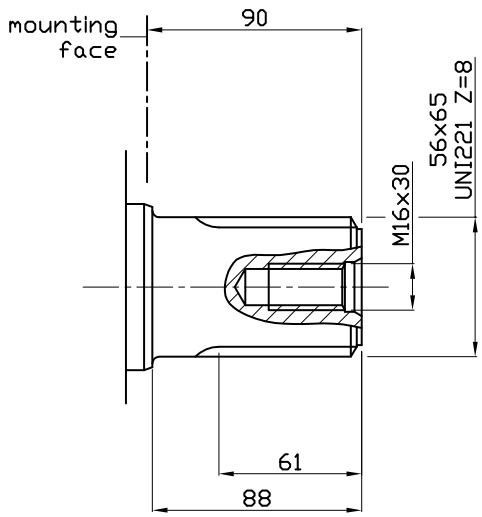
IAM 700/GM4 800/GM4 900/GM4 1000/GM4 1100/GM4 1250/GM4 H4



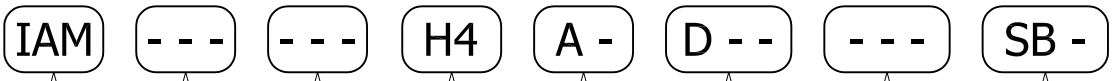
SHAFT

IAM 700/GM4 800/GM4 900/GM4 1000/GM4 1100/GM4 1250/GM4 H4

A0: Standard splined shaft



ORDERING INSTRUCTIONS



Motor model
IAM

Displacement

Interchangeability

- /C (700/C, 800/C)
- /B45 (800/B45)
- /GM4
- /S

Housing

Shaft

- A0 standard splined shaft
- A1 special splined shaft
- A2 parallel keyed shaft
- A3 special female shaft
- A.. other shaft

Distributor

- D31 (3/4" BSP)
- D310 (1" BSP)
- D40 (1" BSP)

BSP THREAD CONFIGURATIONS

- D47 SAE CONFIGURATIONS

Tachometer

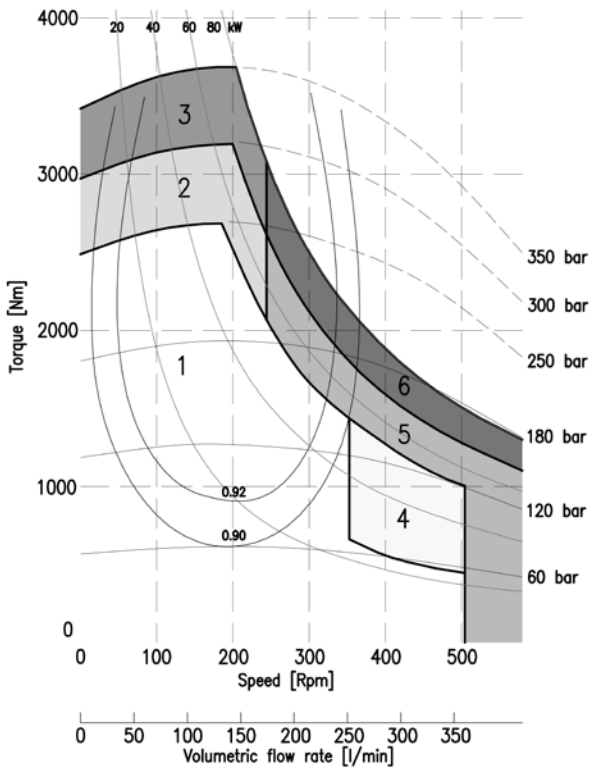
- TA
- TB
- EST
- EST.30
- J TACHOMETER PREDISPOSITION

Spline billet

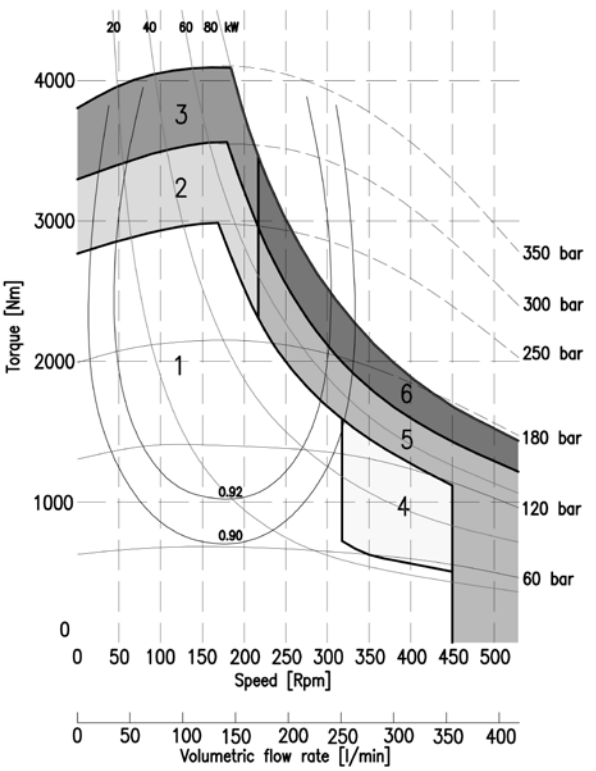
- SB4 46x50 UNI 220
- SB5 46x54 UNI 221
- SB16 52x60 UNI 222

EXAMPLE:
IAM.700.H4.A1.D40.SB5
IAM.800/B45.H4.A1.D31.TA
IAM.700/C.H4.A0.D40.J.SB16

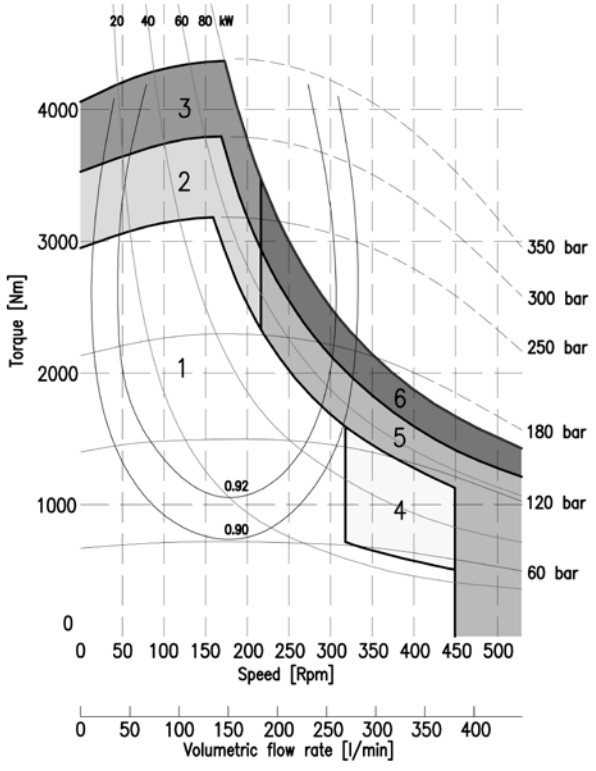
IAM 700 H4



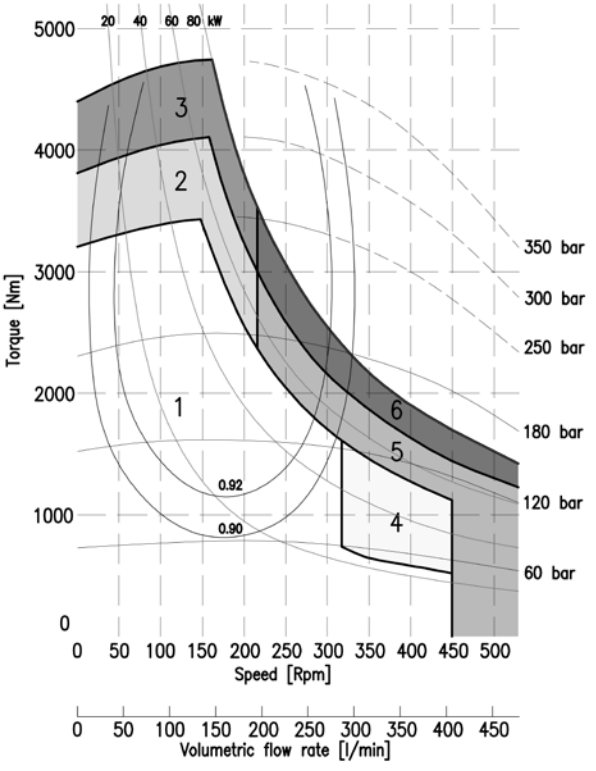
IAM 800 H4



IAM 850 H4

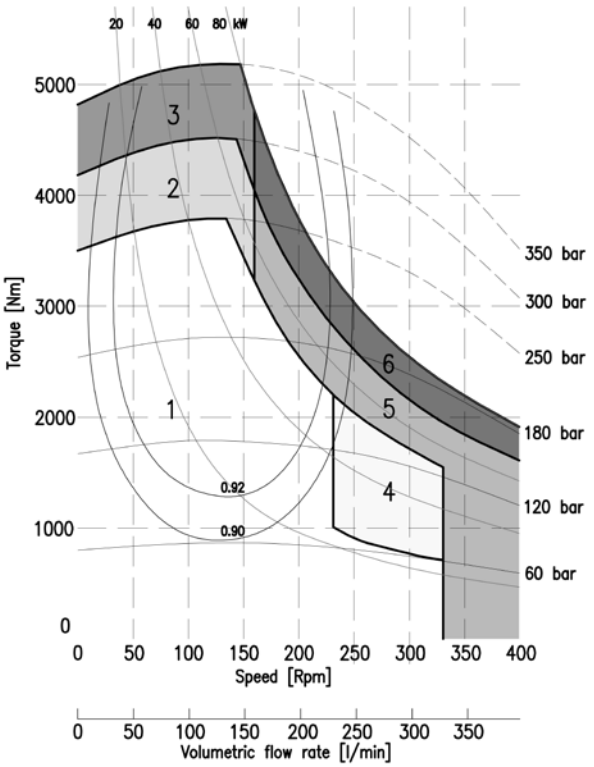


IAM 900 H4

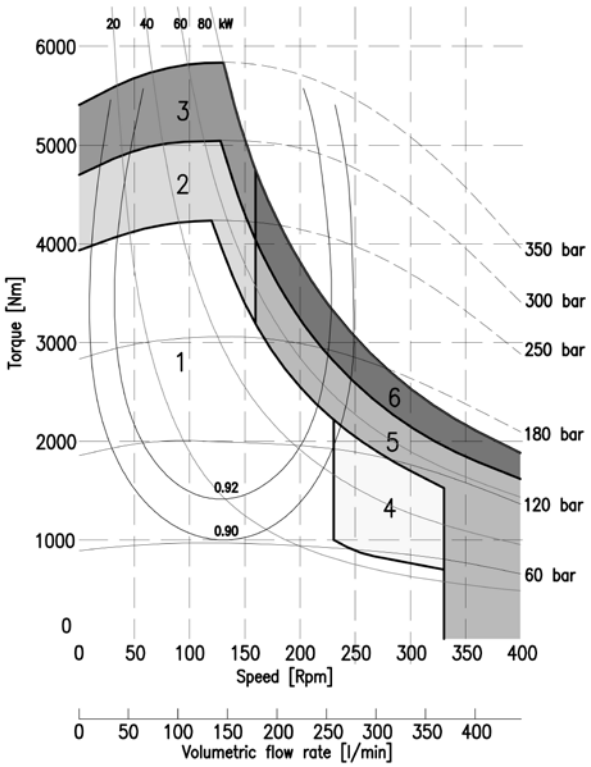


1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

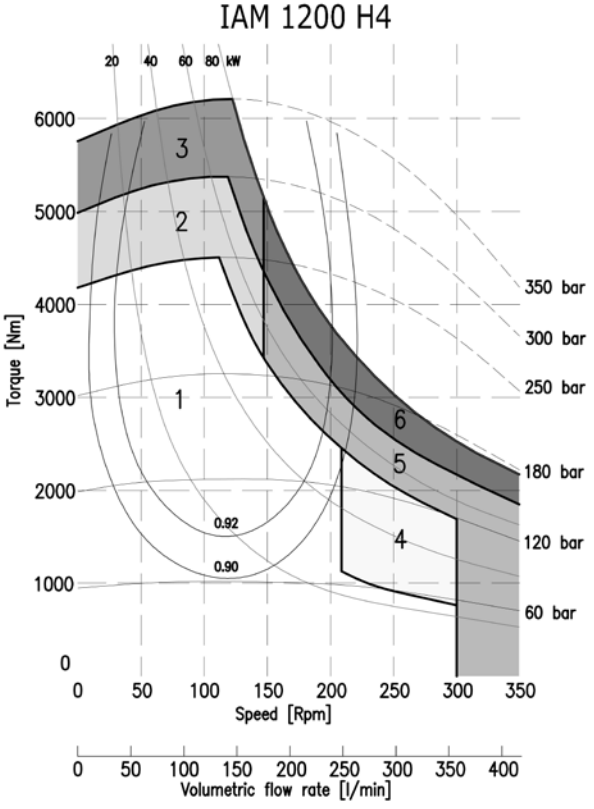
IAM 1000 H4



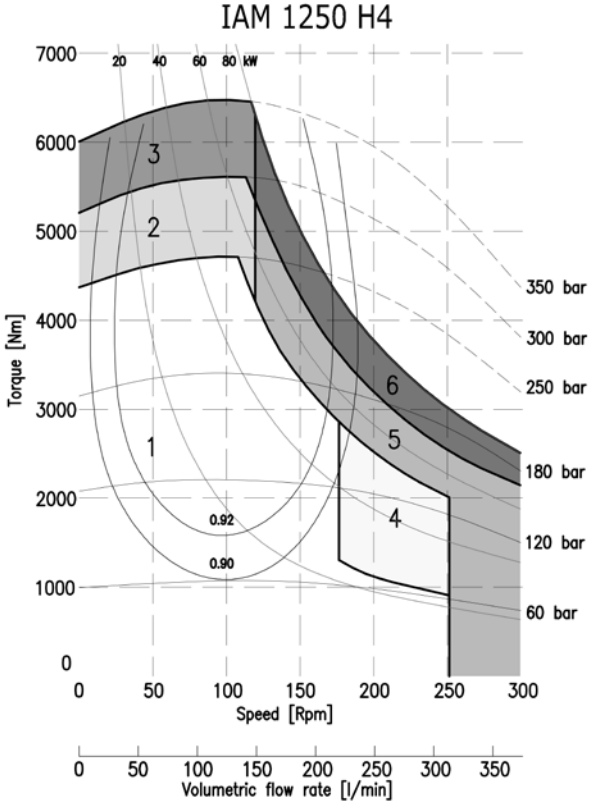
IAM 1100 H4



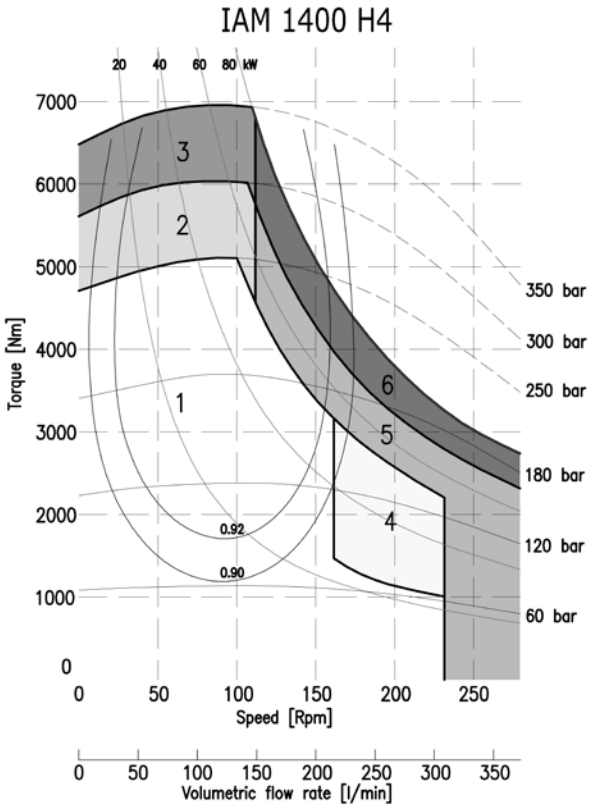
IAM 1200 H4



IAM 1250 H4



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H45 MODEL

IAM 1100-1400-1600
1800 H45

IAM 1100-1400/C H45

INDEX

TECHNICAL DATA H45

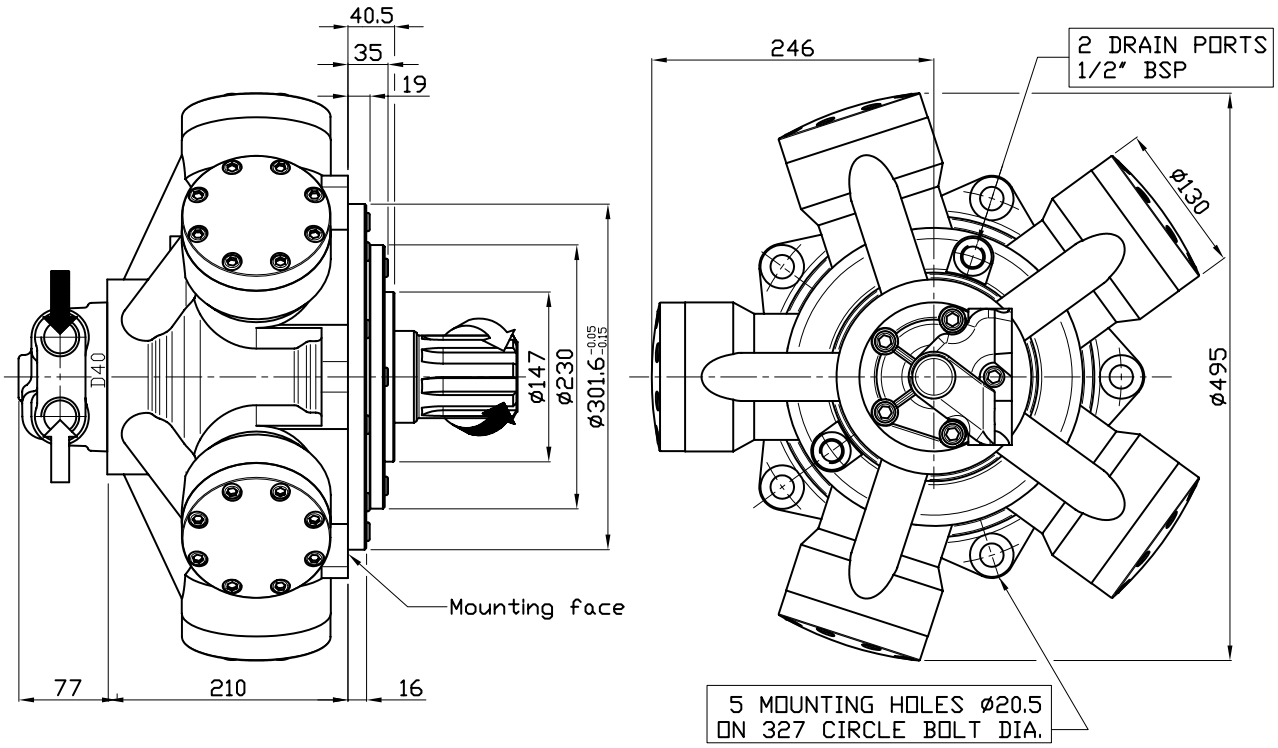
MODEL		IAM 1100 H45	IAM 1400 H45	IAM 1600 H45	IAM 1800 H45
Displacement	cc/rev	1183	1376	1648	1815
Specific Torque	Nm/bar	18.8	21.9	26.2	28.9
Max cont. Pressure	bar	250	250	250	250
Max int. Pressure	bar	300	300	300	300
Peak pressure	bar	350	350	350	350
Max continuous speed	rpm	350	300	275	250
Peak speed	rpm	400	350	325	300
Max continuous power	HP	116	116	116	116
	kW	85	85	85	85
Max power	HP	161	161	161	161
	kW	120	120	120	120

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 118 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 0.5 rpm
- Flushing flow: 10 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

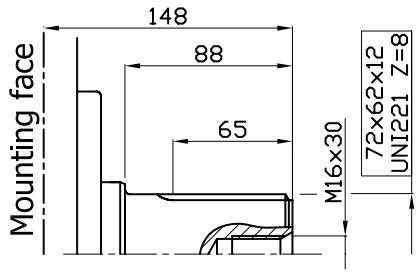
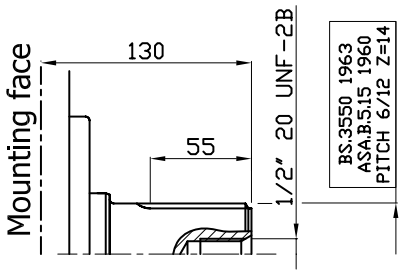
SIZE

IAM H45 1100-1400-1600-1800



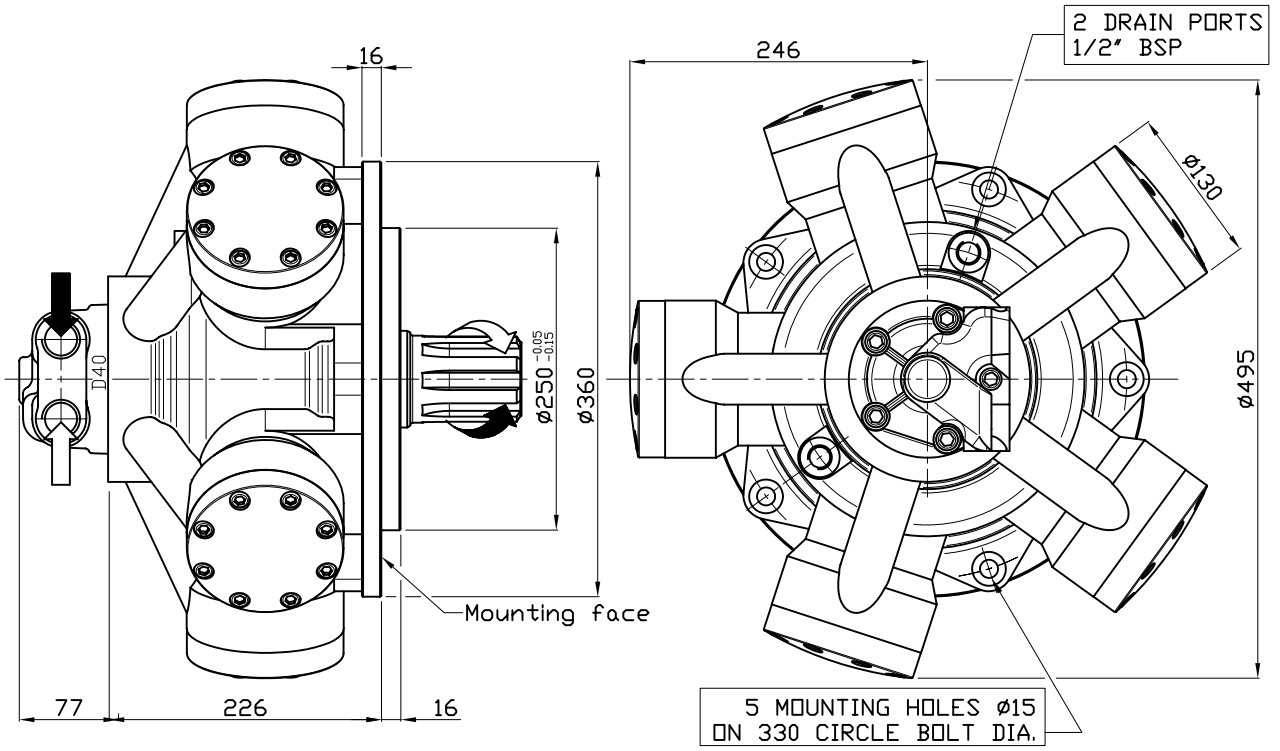
SHAFT

IAM H45 1100-1400-1600-1800

A0: Standard splined shaft	A1: Splined shaft on request
	

SIZE

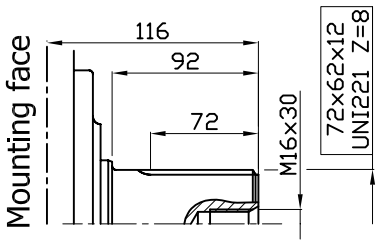
IAM H45 1100/C -1400/C



SHAFT & OPTION

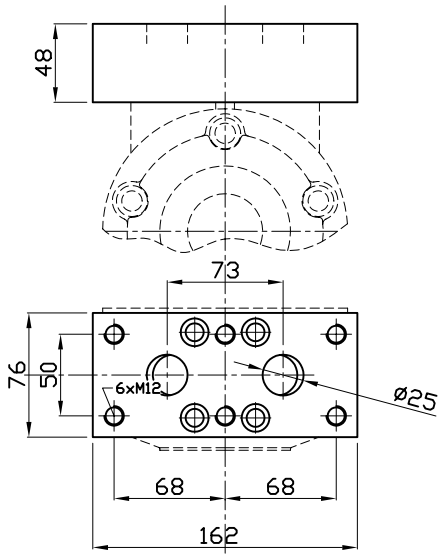
IAM H45 1100/C -1400/C

A0: Standard splined shaft

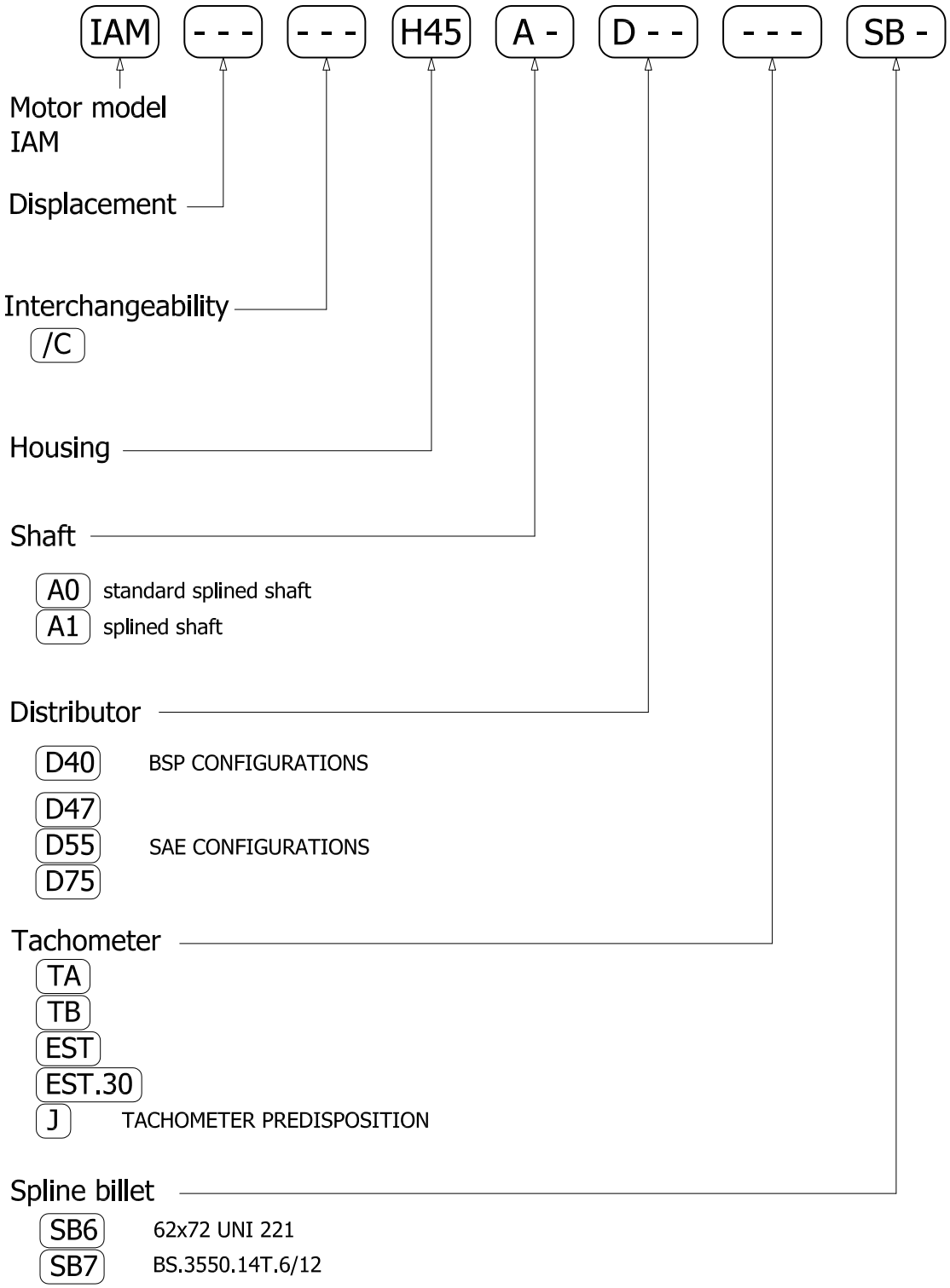


FL3: connection block

Connection block, fitting D55 distributor, for motor MR 1100/1400/1600/1800/2100

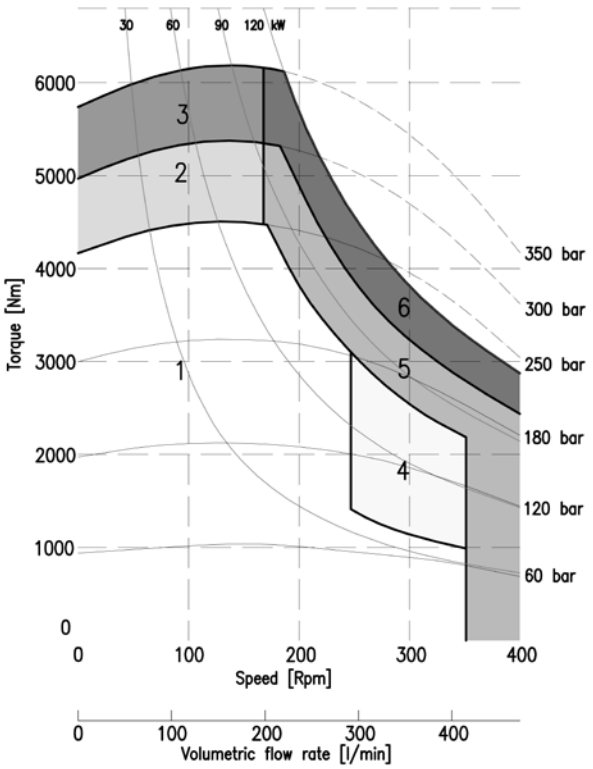


ORDERING INSTRUCTIONS

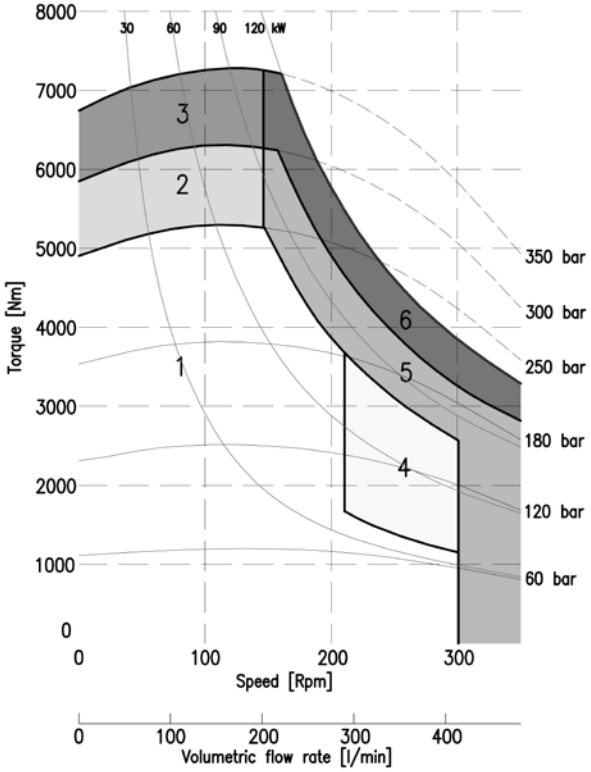


EXAMPLE:
IAM.1100/C.H45.A0.D40
IAM.1400.H45.A1.D55.TA.SB6
IAM.1600.H45.A0.D40

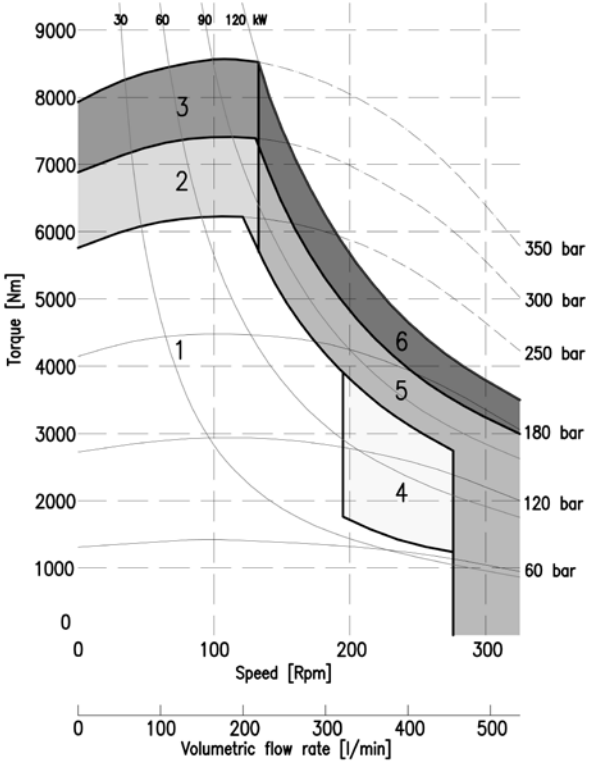
IAM 1100 H45



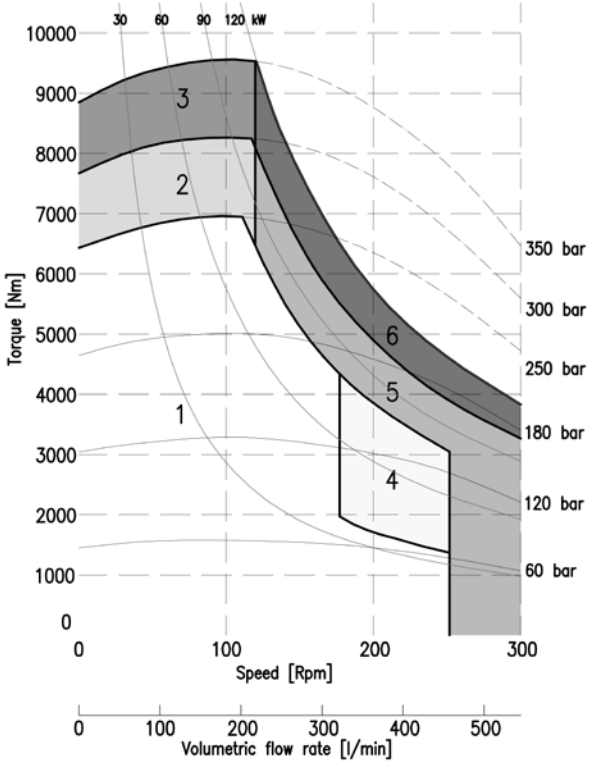
IAM 1400 H45



IAM 1600 H45



IAM 1800 H45



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

Italgroup®
HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H5 MODEL

IAM 1000-1200-1400
1500-1600-1800
2000-2200 H5

IAM 1200-1400-1500/C H5

IAM 1600-1800-2000
2200/C H5

IAM 1000/B60 - 1400/B80
1600/B100 H5

IAM 1000-1200-1400
1500-1600-1800
2000-2200 H5

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Italgroup®
HYDRAULIC MOTORS
ITALY

TECHNICAL DATA H5

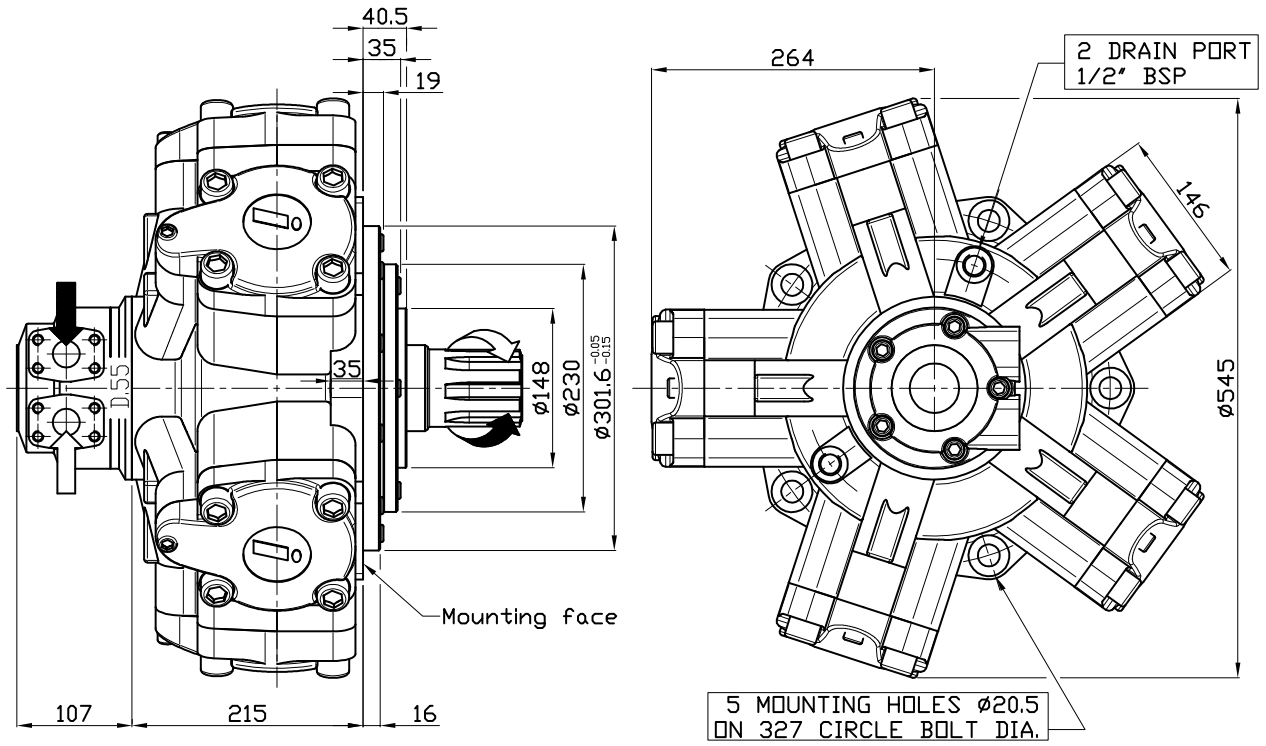
MODEL		IAM 1000 H5	IAM 1200 H5	IAM 1400 H5	IAM 1500 H5	IAM 1600 H5	IAM 1800 H5	IAM 2000 H5	IAM 2200 H5
Displacement	cc/rev	1094	1231	1376	1528	1648	1815	2035	2220
Specific Torque	Nm/bar	17.4	19.6	21.9	24.3	26.2	28.9	32.4	35.3
Max cont. Pressure	bar	250	250	250	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350	350	350	350
Max continuous speed	rpm	350	300	300	300	300	250	230	220
Peak speed	rpm	400	350	350	350	340	300	260	240
Max continuous power	HP	122	122	122	122	122	122	122	122
	kW	90	90	90	90	90	90	90	90
Max power	HP	161	161	161	161	161	161	161	161
	kW	120	120	120	120	120	120	120	120

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 173 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 0.5 rpm
- Flushing flow: 10 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

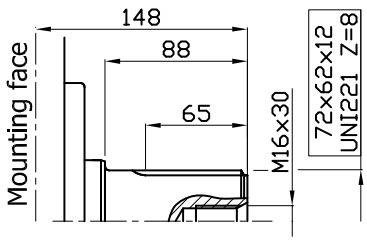
IAM 1000-1200-1400-1500-1600-1800-2000-2200 H5



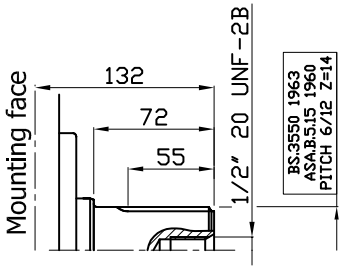
SHAFT

IAM 1000-1200-1400-1500-1600-1800-2000-2200 H5

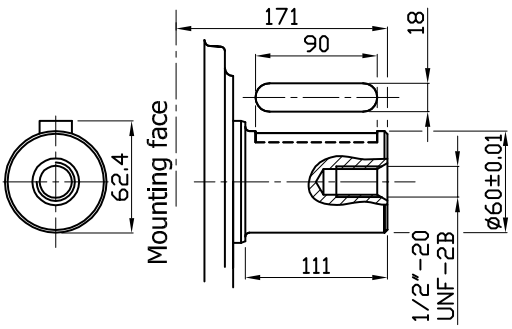
A0: Standard splined shaft



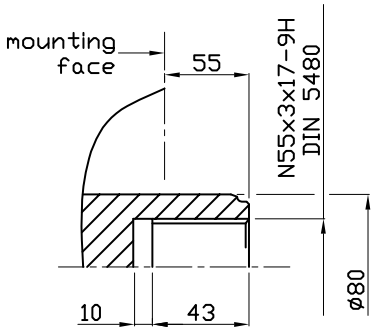
A1: Splined shaft on request



A2: Parallel shaft on request

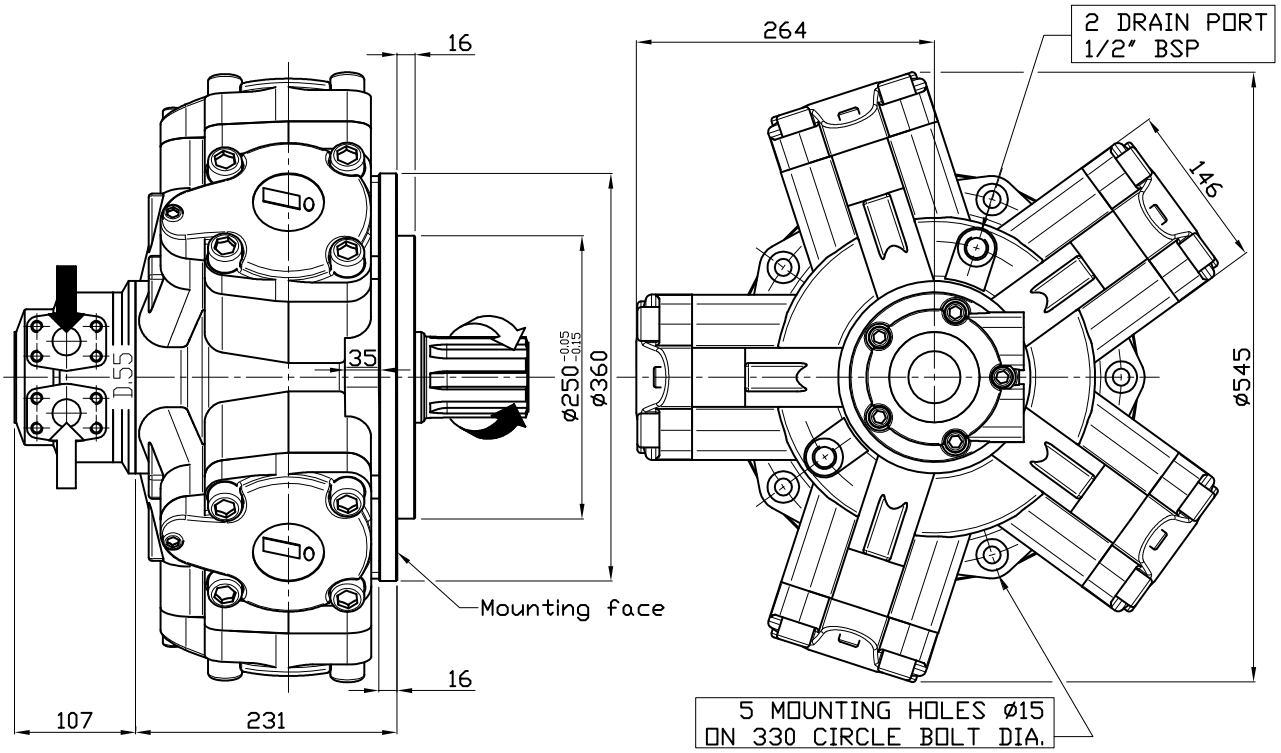


A3: Female shaft on request



SIZE

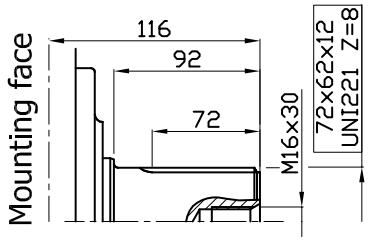
IAM 1200/C-1400/C-1500/C H5



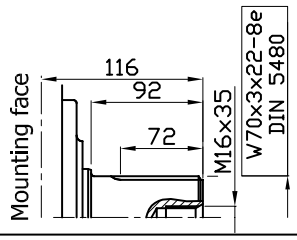
SHAFT & OPTION

IAM 1200/C-1400/C-1500/C H5

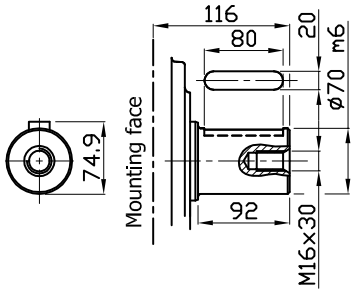
A0: Standard splined shaft



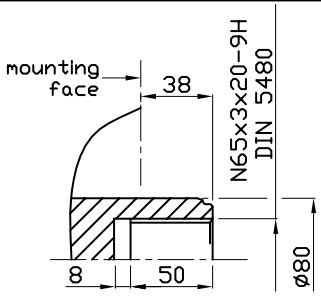
A1: Splined shaft on request



A2: Parallel shaft on request

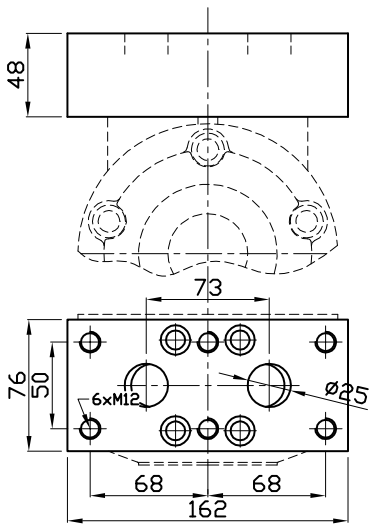


A3: Female shaft on request



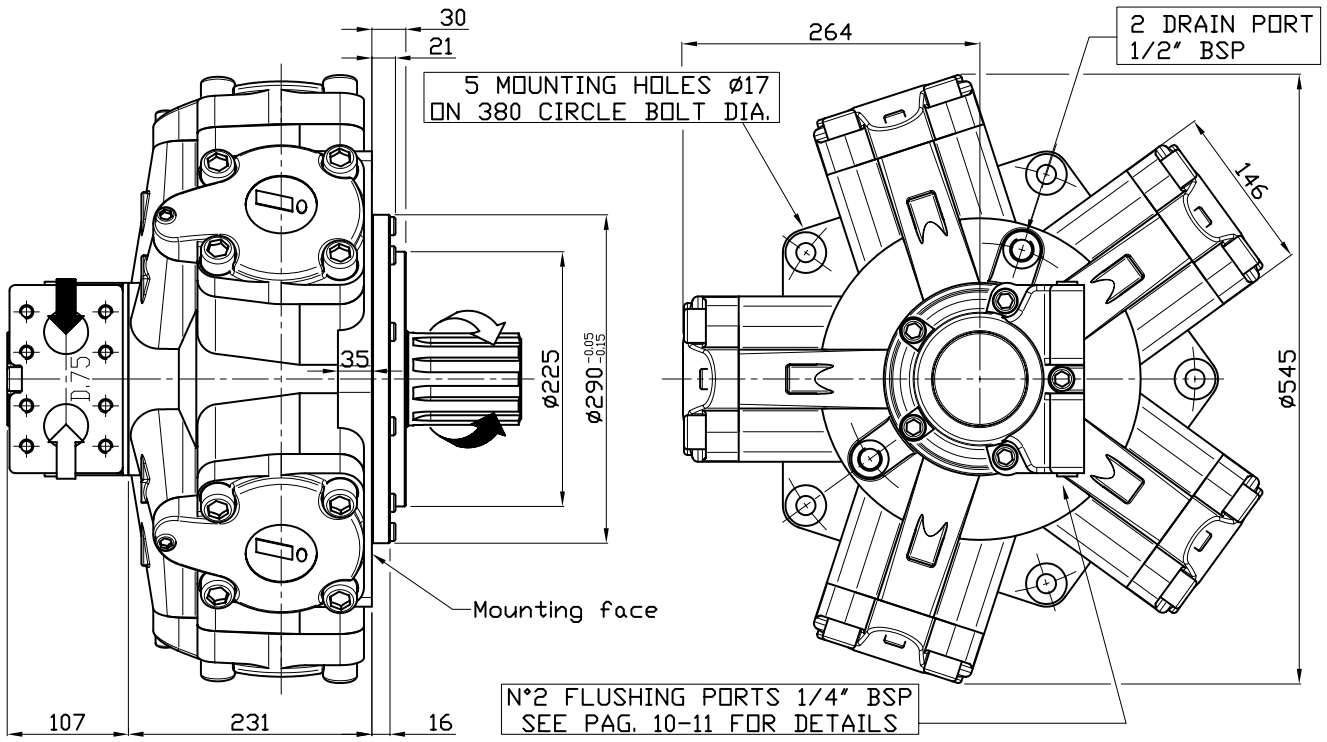
FL3: connection block

Connection block, fitting D55 distributor, for motor MR 1100/1400/1600/1800/2100



SIZE

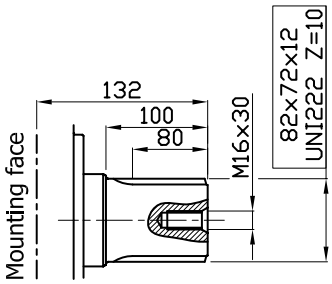
IAM 1600/C-1800/C-2000/C-2200/C H5



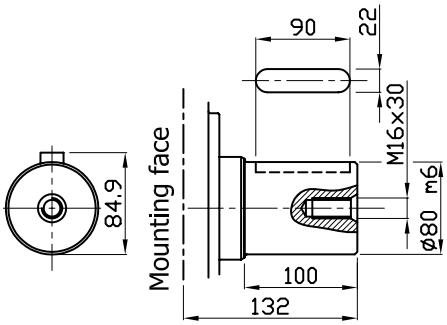
SHAFT & OPTION

IAM 1600/C-1800/C-2000/C-2200/C H5

A0: Standard splined shaft

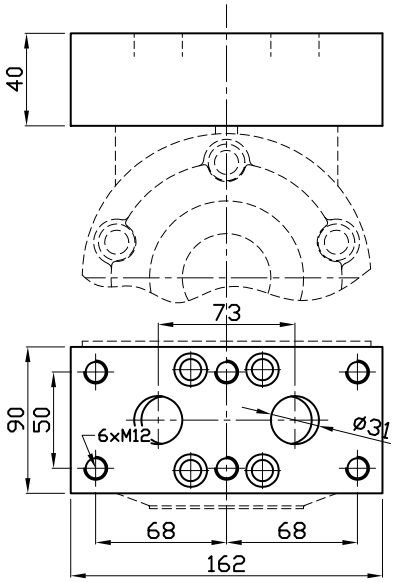


A2: Parallel shaft on request



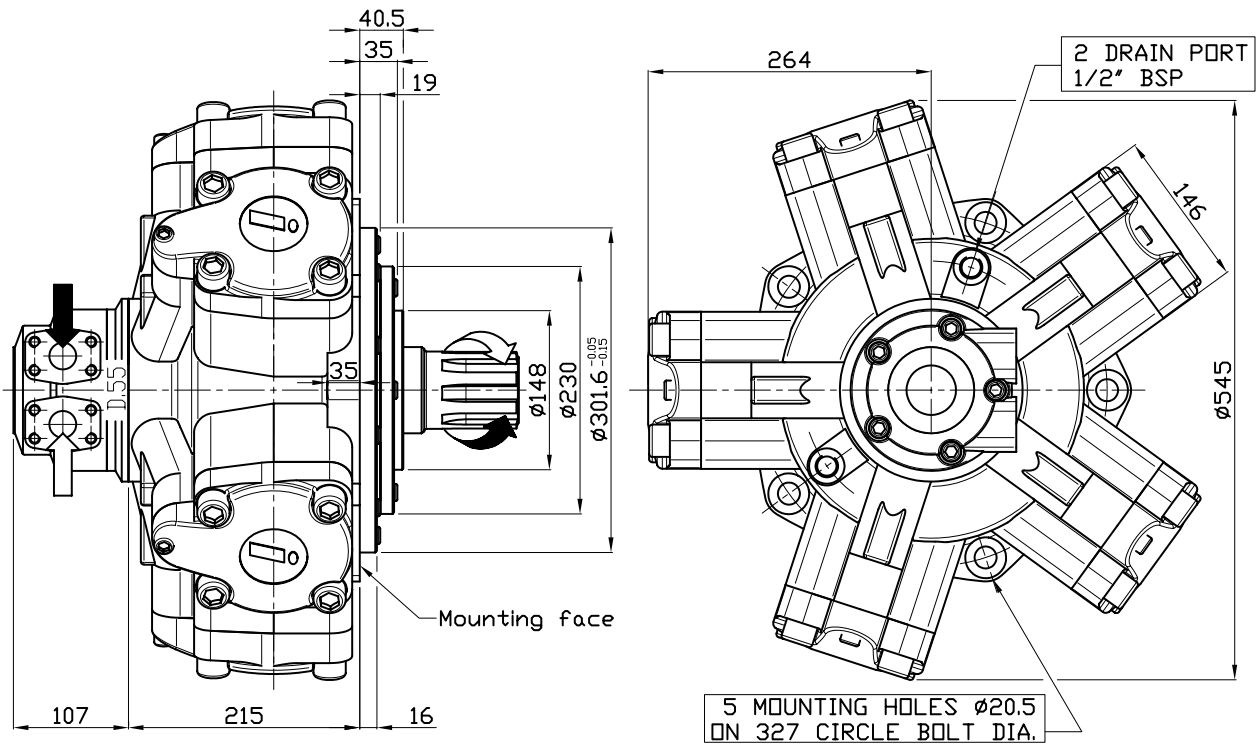
FL4: connection block

Connection block, fitting D75 distributor, for motor MR 1100/1400/1600/1800/2100



SIZE

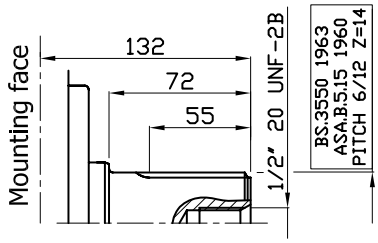
IAM 1000/B60-1400/B80-1600/B100 H5



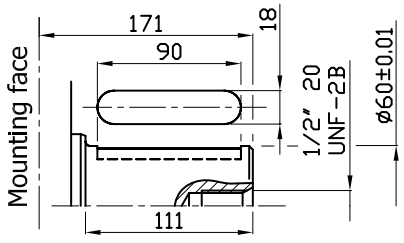
SHAFT & OPTION

IAM 1000/B60-1400/B80-1600/B100 H5

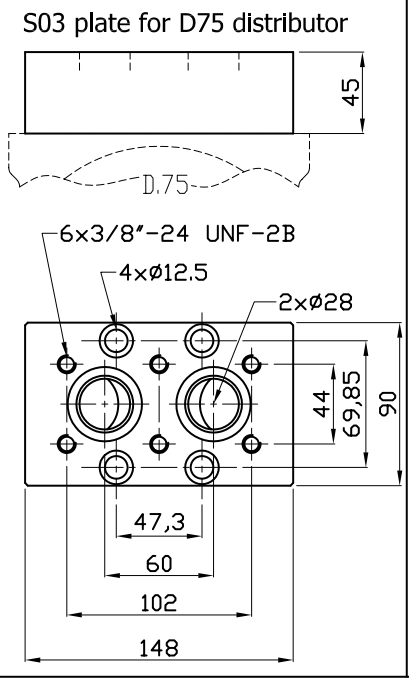
A1: Standard splined shaft



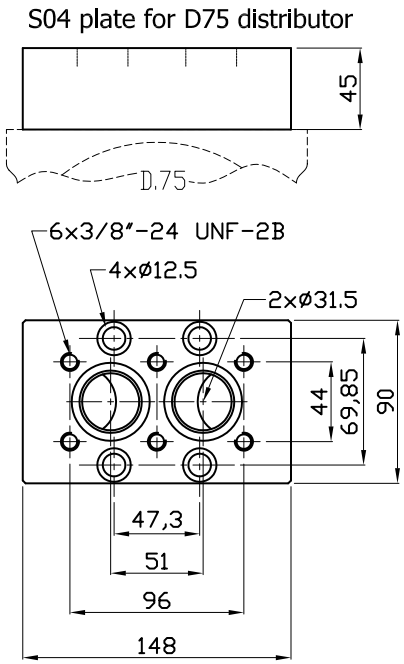
A2: Parallel shaft on request



FL5: connection block

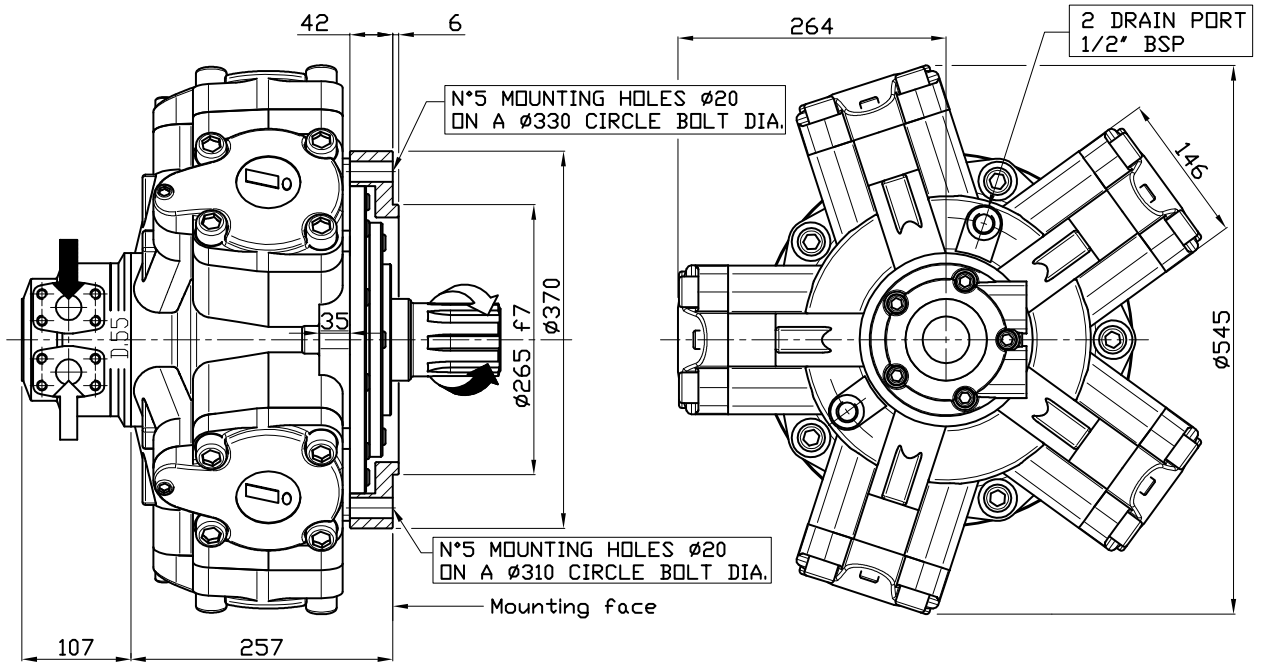


FL6: connection block



SIZE

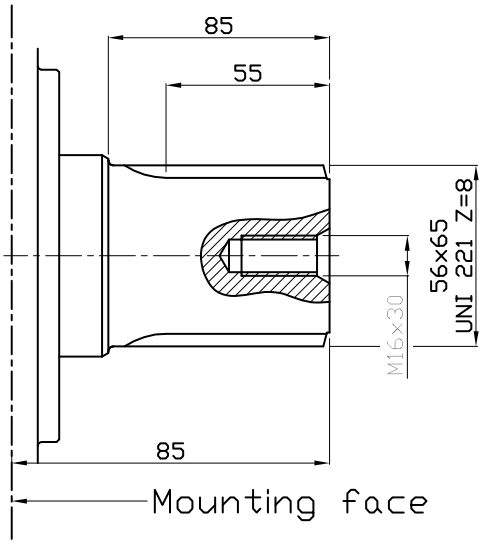
IAM H5 1000/GM5-1200/GM5-1400/GM5-1500/GM5
1600/GM5-1800/GM5-2000/GM5-2200/GM5 (S)



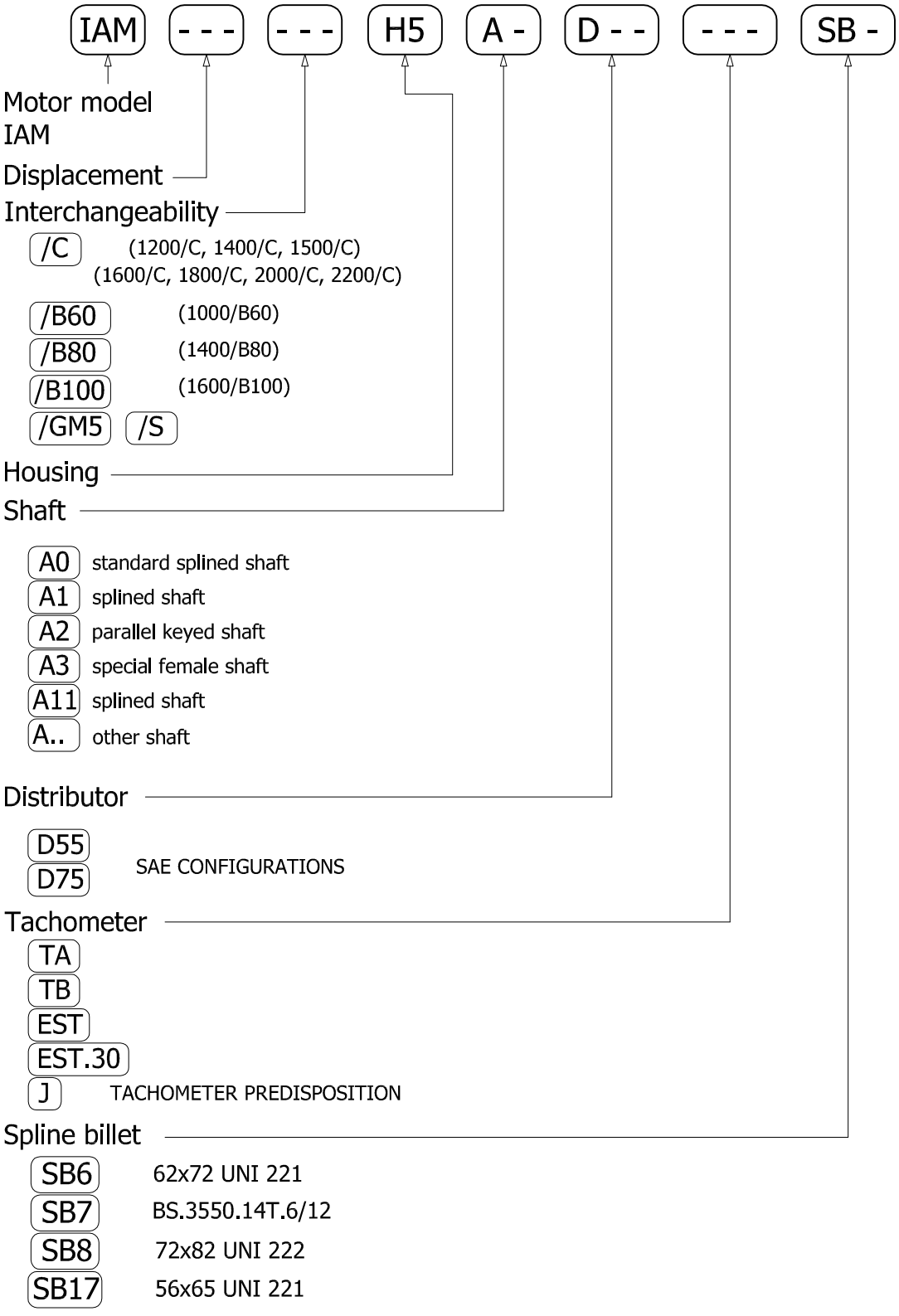
SHAFT

IAM H5 1000/GM5-1200/GM5-1400/GM5-1500/GM5
1600/GM5-1800/GM5-2000/GM5-2200/GM5 (S)

A0: Standard splined shaft

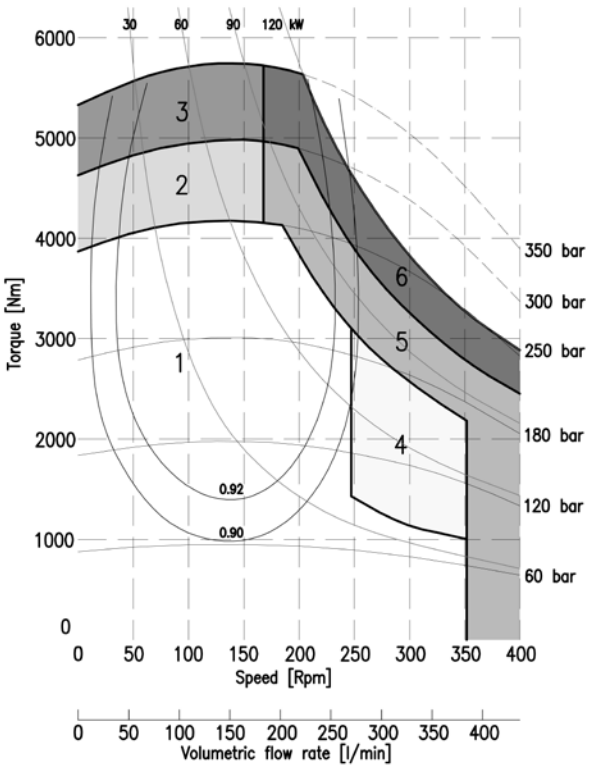


ORDERING INSTRUCTIONS

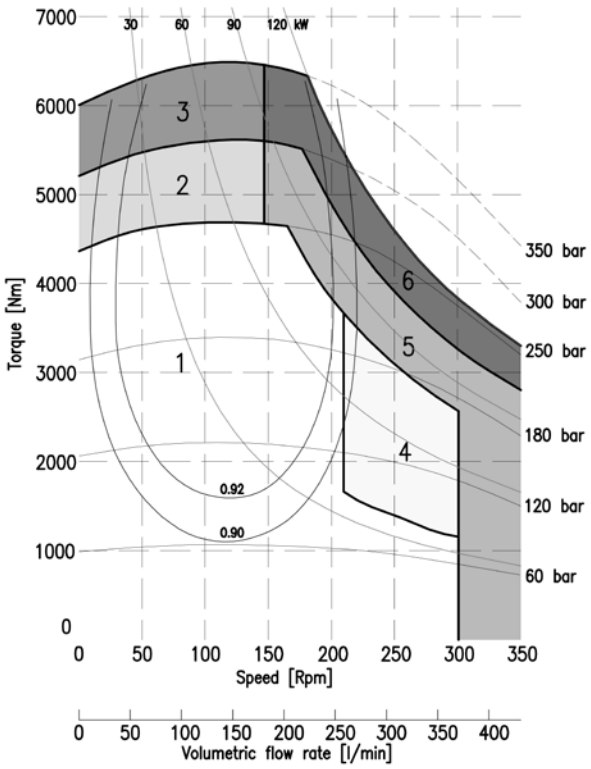


EXAMPLE:
IAM.1200.H5.A1.D55
IAM.1600.H5.A0.D75.TA.SB6
IAM.1800/C.H5.A0.D75.EST30.SB8

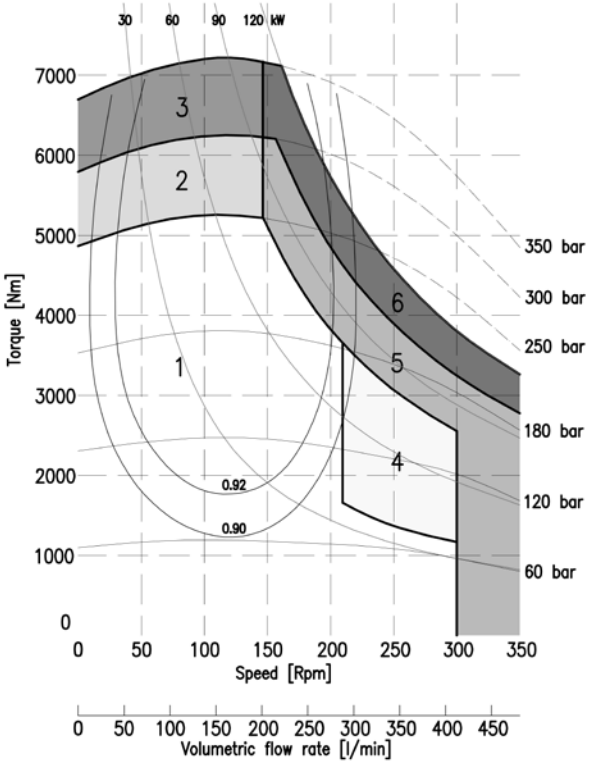
IAM 1000 H5



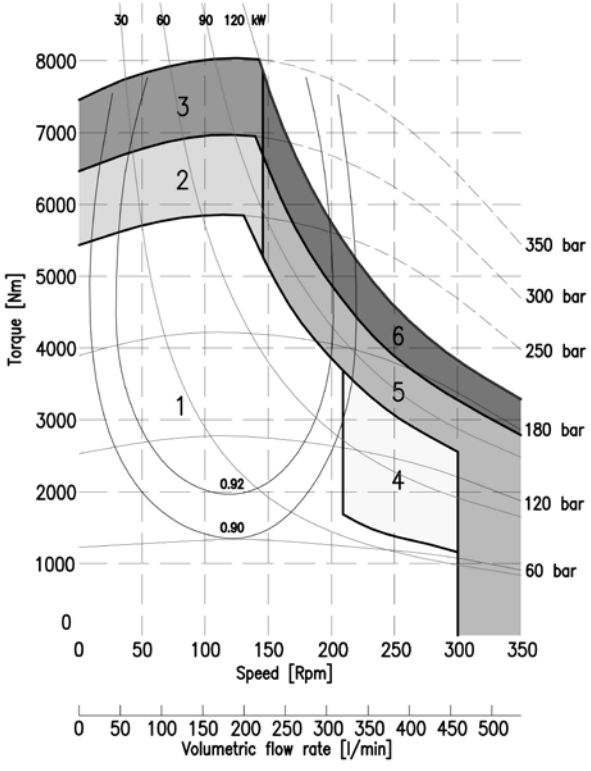
IAM 1200 H5



IAM 1400 H5



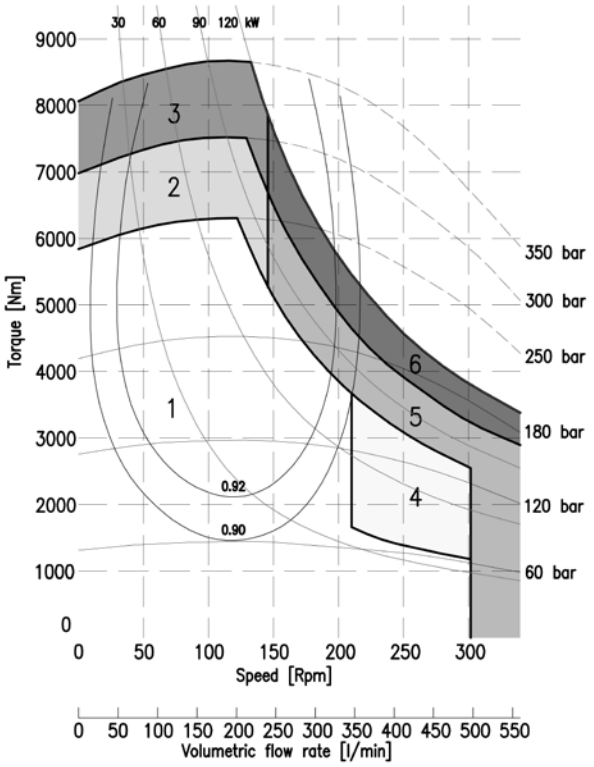
IAM 1500 H5



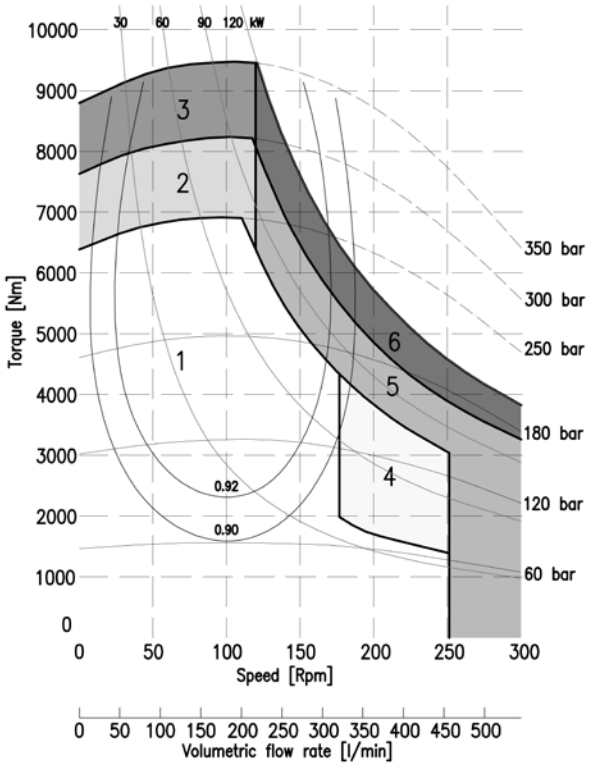
1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)

4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

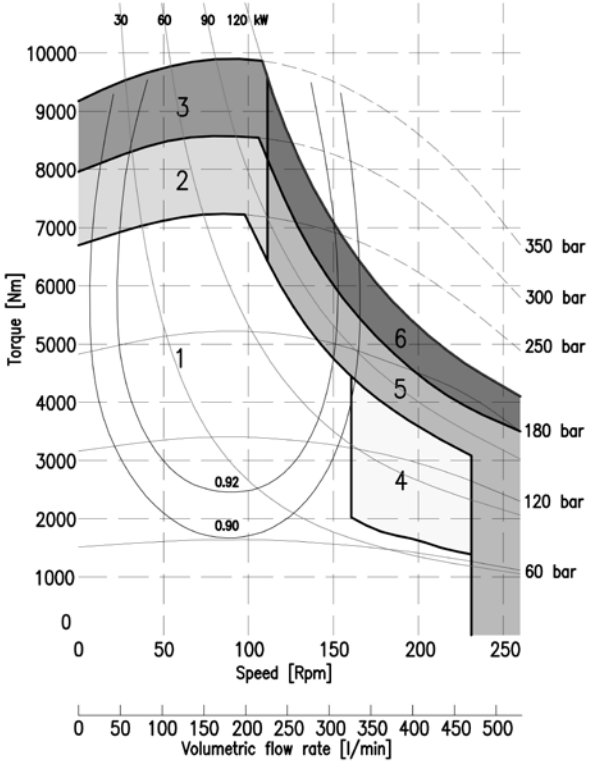
IAM 1600 H5



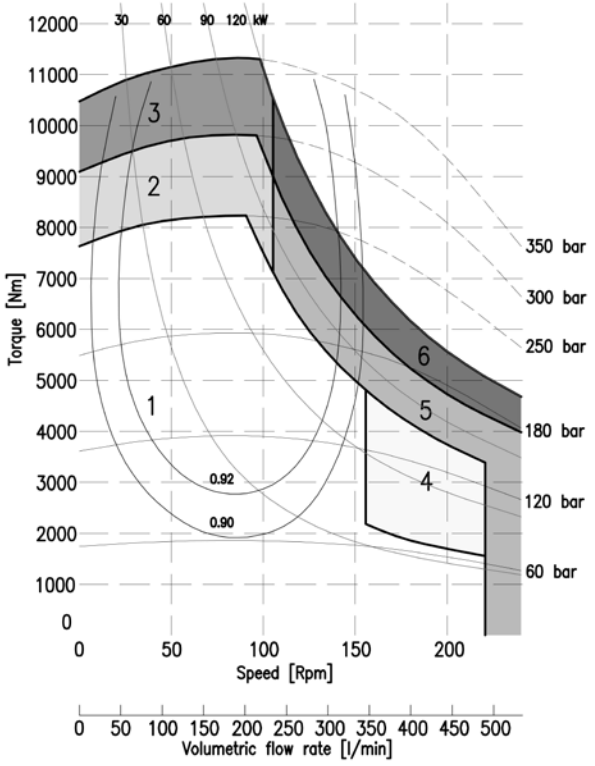
IAM 1800 H5



IAM 2000 H5



IAM 2200 H5



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

ITALGROUP - ADVANCED - MOTORS

IAM SERIES

H55 MODEL

IAM 2200-2500-2800 H55

IAM 2500-2800-3000/C H55

INDEX

TECHNICAL DATA H55

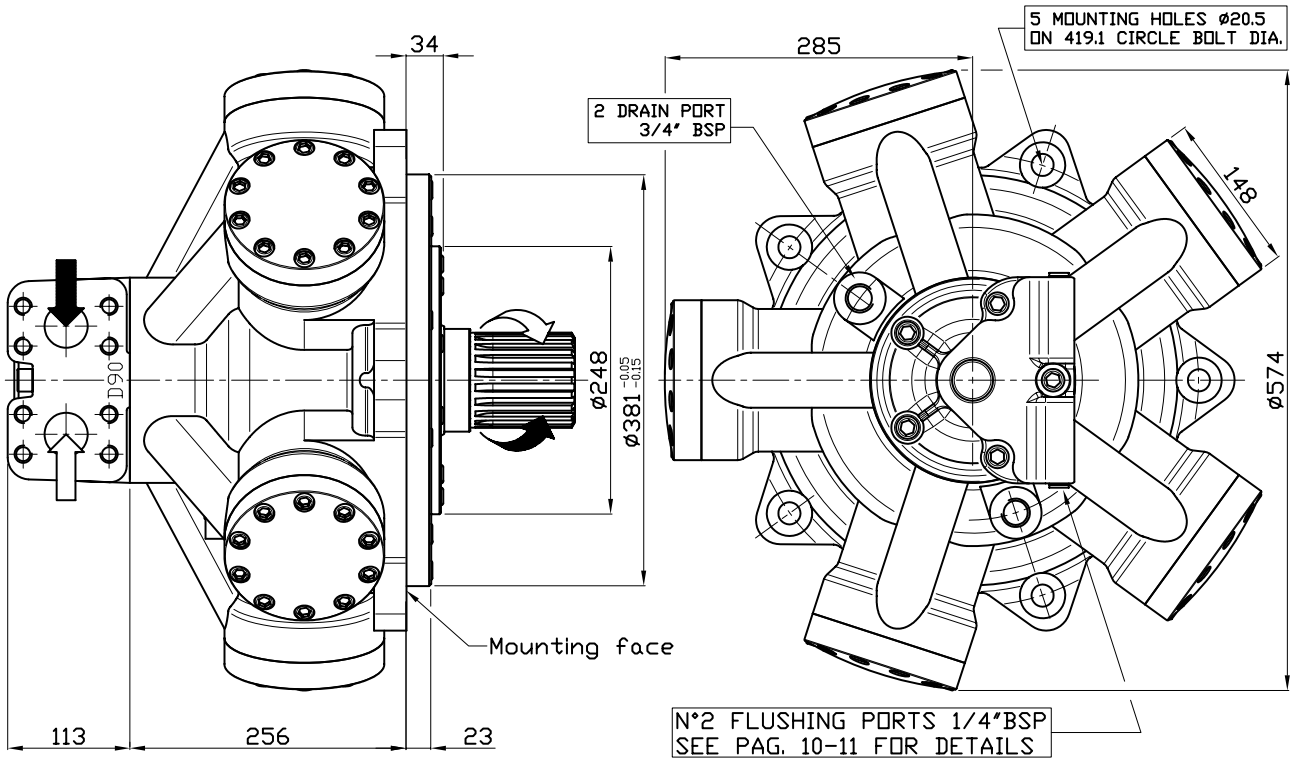
MODEL		IAM 2200 H55	IAM 2500 H55	IAM 2800 H55	IAM 3000 H55
Displacement	cc/rev	2126	2525	2807	3028
Specific Torque	Nm/bar	33.8	40.2	44.7	48.2
Max cont. Pressure	bar	250	250	250	250
Max int. Pressure	bar	300	300	300	300
Peak pressure	bar	350	350	350	350
Max continuous speed	rpm	240	240	240	230
Peak speed	rpm	280	280	280	270
Max continuous power	HP	163	163	163	163
	kW	120	120	120	120
Max power	HP	228	228	228	228
	kW	170	170	170	170

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 203 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 0.5 rpm
- Flushing flow: 15 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

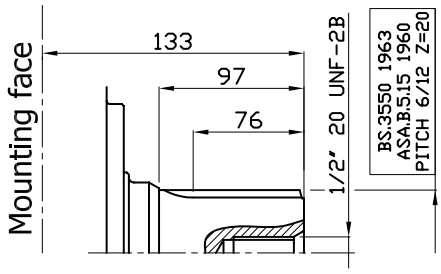
IAM H55 2200-2500-2800



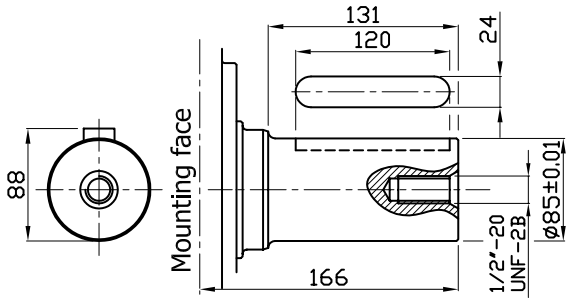
SHAFT

IAM H55 2200-2500-2800

A1: Standard splined shaft

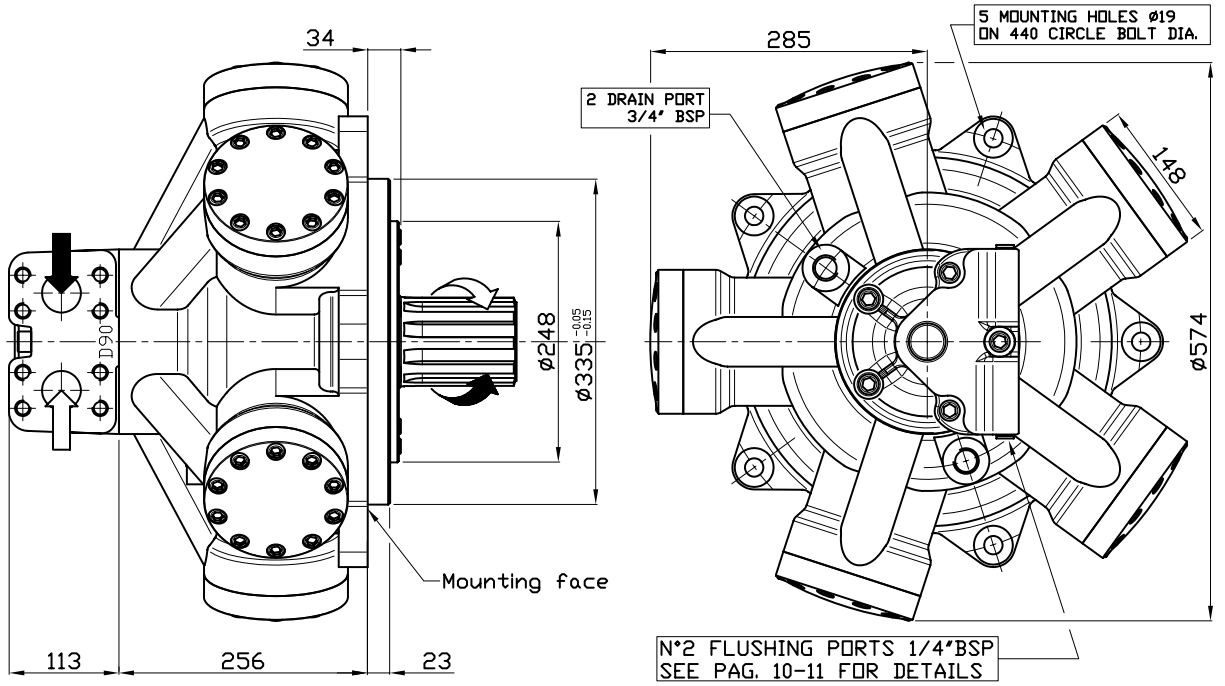


A2: Parallel shaft on request



SIZE

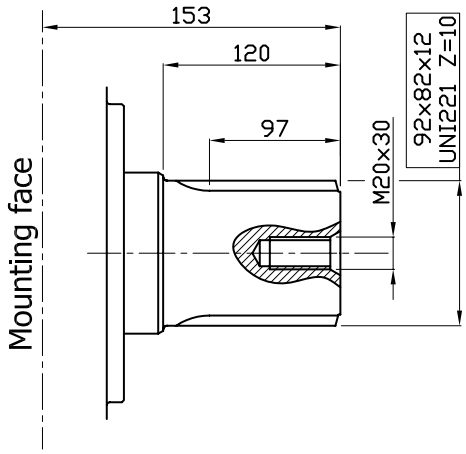
IAM H55 2500/C-2800/C-3000/C



SHAFT

IAM H55 2500/C-2800/C-3000/C

A0: Standard splined shaft



ORDERING INSTRUCTIONS

Motor model
IAM

Displacement

Interchangeability
/C

Housing

Shaft

A0 standard splined shaft
A1 splined shaft
A2 parallel keyed shaft

Distributor

D90 SAE CONFIGURATIONS

Tachometer

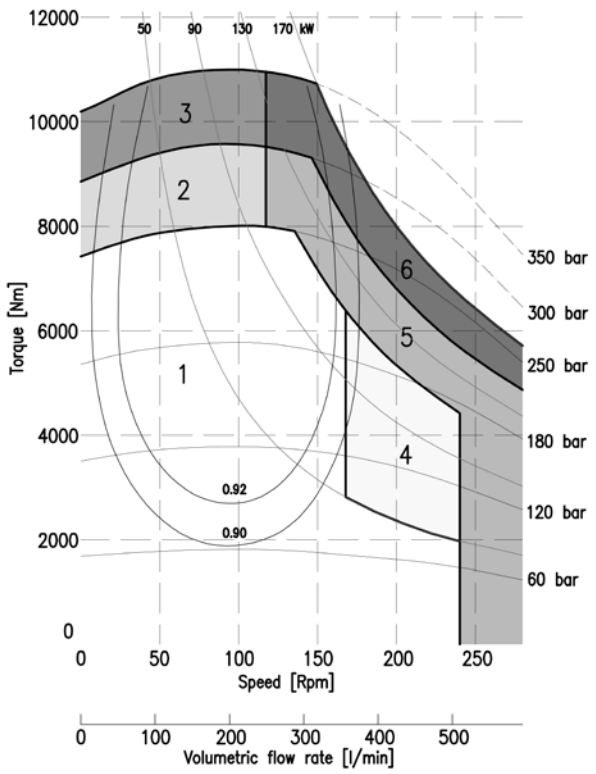
TA
TB
EST
EST.30
J TACHOMETER PREDISPOSITION

Spline billet

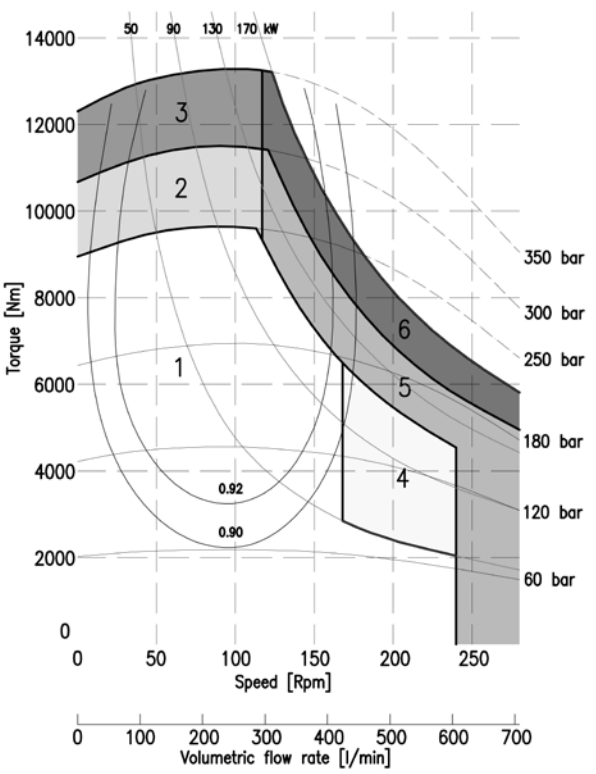
SB9 82x92 UNI 221
SB10 BS.3550.20T.6/12

EXAMPLE:
IAM.2200.H55.A1.D90
IAM.2800.H55.A2.D90.TA.SB9
IAM.2500/C.H55.A0.D90

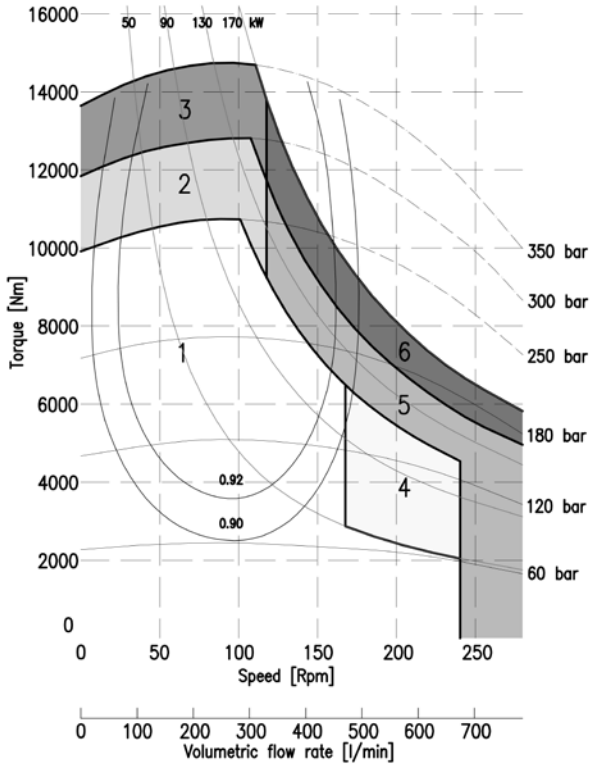
IAM 2200 H55



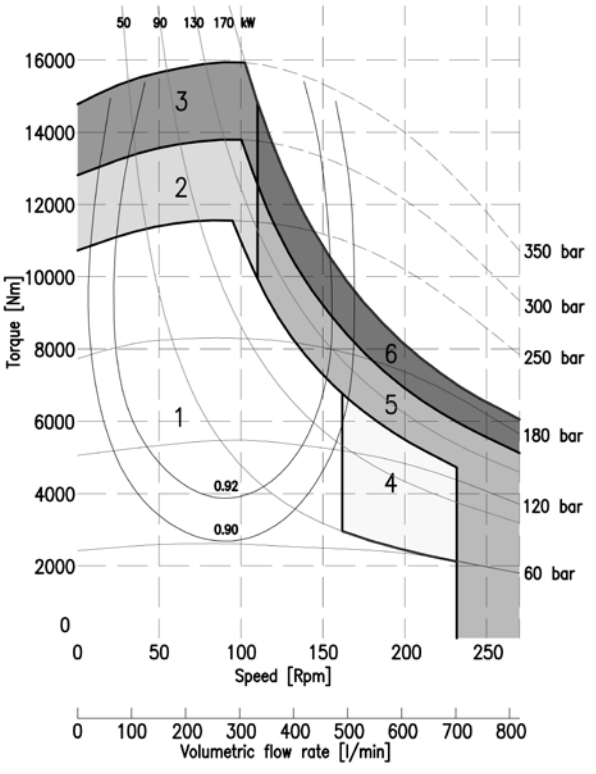
IAM 2500 H55



IAM 2800 H55



IAM 3000 H55



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

ITALGROUP - ADVANCED - MOTORS

IAM SERIES

H6 MODEL

IAM 2200-2500-2800
3000-3200-3500 H6

IAM 2200-2500-2800
3000-3200-3500/C H6

IAM 2200/B125
2500/B150
3000/B200

INDEX

TECHNICAL DATA H6

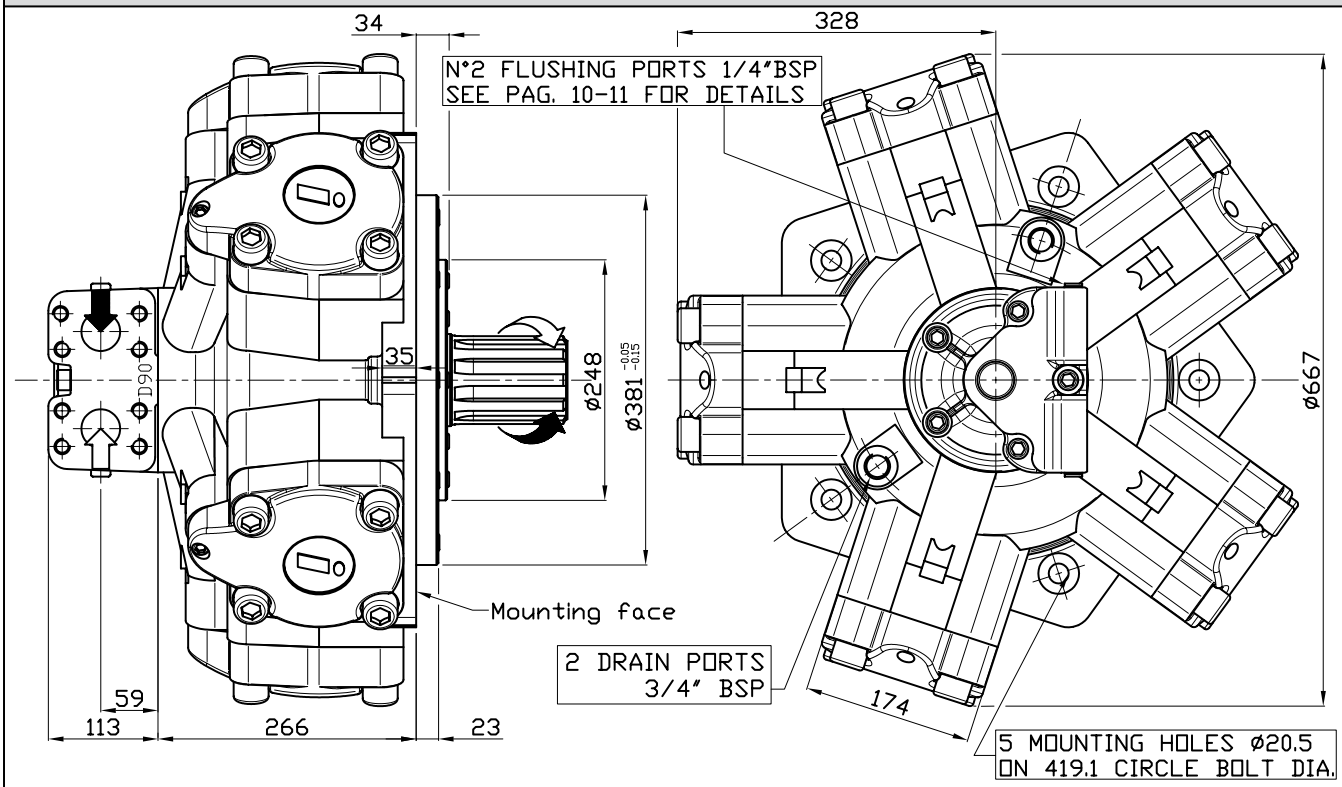
MODEL		IAM 2200 H6	IAM 2500 H6	IAM 2800 H6	IAM 3000 H6	IAM 3200 H6	IAM 3500 H6
Displacement	cc/rev	2206	2525	2807	2983	3289	3479
Specific Torque	Nm/bar	35.1	40.2	44.7	47.5	52.3	55.4
Max cont. Pressure	bar	250	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350	350
Max continuous speed	rpm	220	220	220	210	200	200
Peak speed	rpm	260	260	260	250	240	240
Max continuous power	HP	163	163	163	163	163	163
	kW	120	120	120	120	120	120
Max power	HP	228	228	228	228	228	228
	kW	170	170	170	170	170	170

- N° of pistons: 5
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 308 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 0.5 rpm
- Flushing flow: 15 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

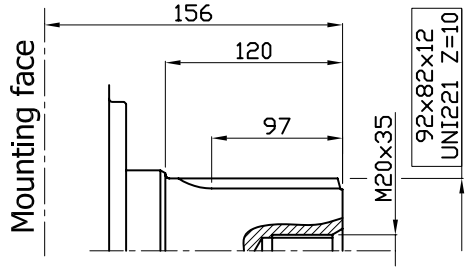
IAM 2200-2500-2800-3000-3200-3500 H6



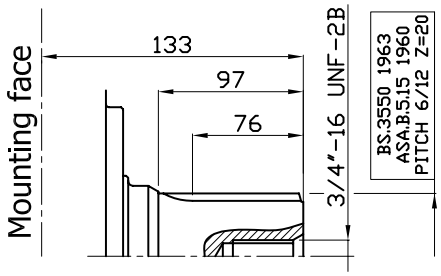
SHAFT

IAM 2200-2500-2800-3000-3200-3500 H6

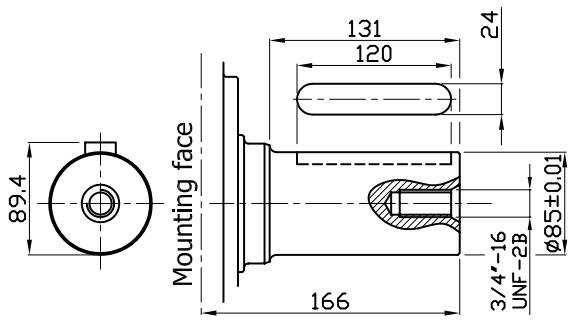
A0: Standard splined shaft



A1: Splined shaft on request

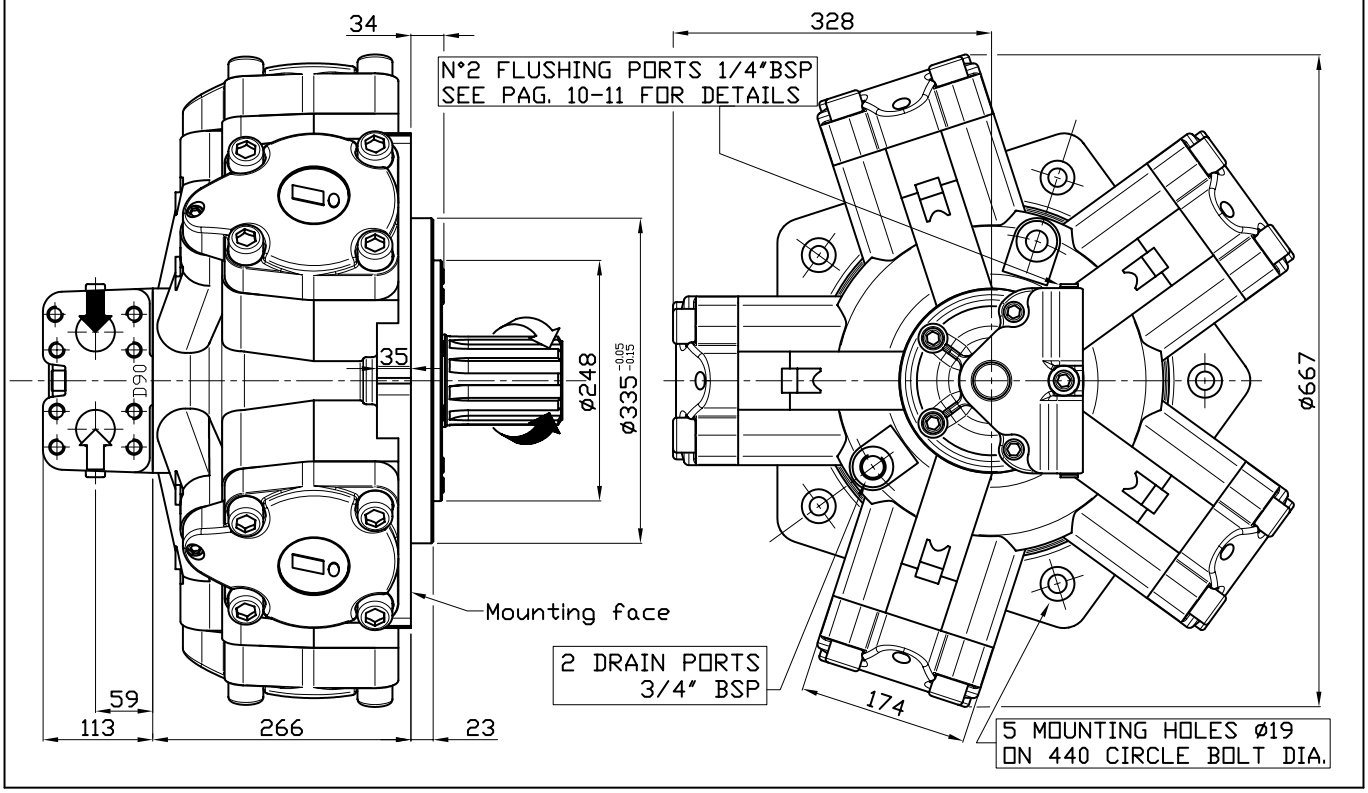


A2: Parallel shaft on request



SIZE

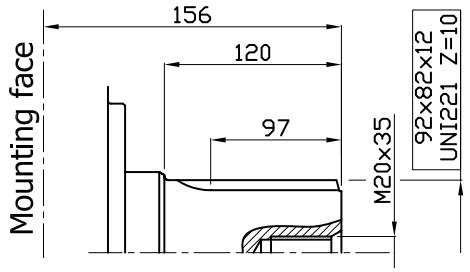
IAM 2200/C-2500/C-2800/C-3000/C-3200/C-3500/C H6



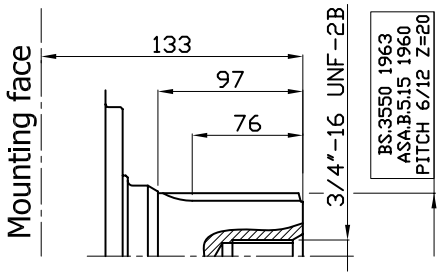
SHAFT

IAM 2200/C-2500/C-2800/C-3000/C-3200/C-3500/C H6

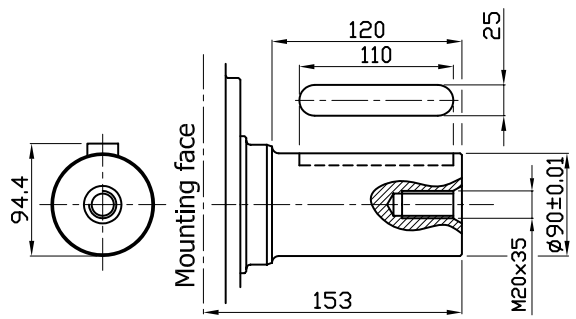
A0: Standard splined shaft



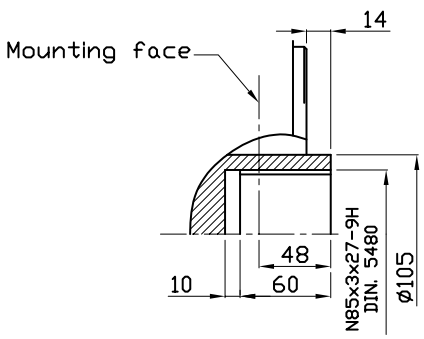
A1: Splined shaft on request



A2: Parallel shaft on request

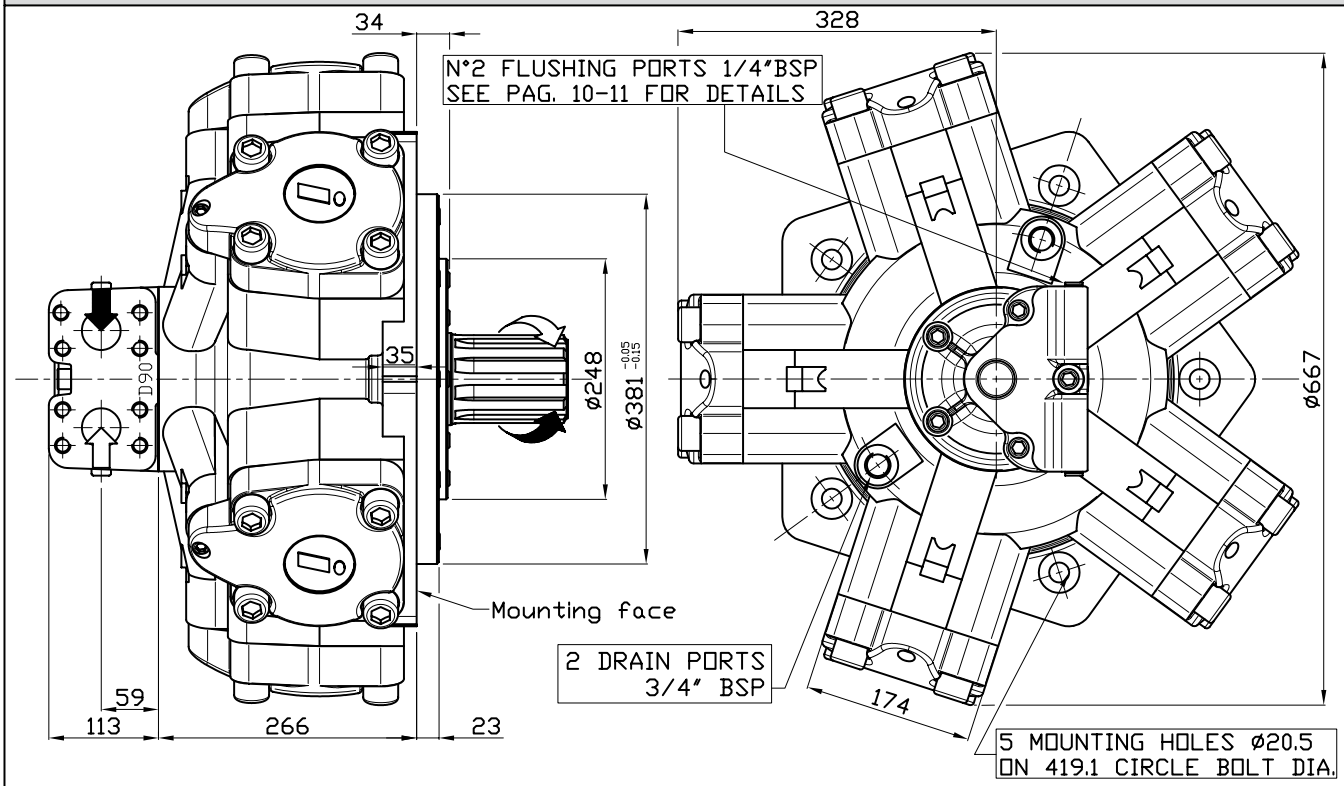


A3: Female shaft on request



SIZE

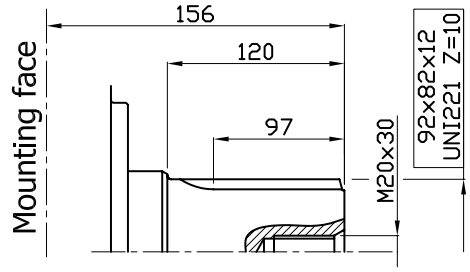
IAM 2200/B125-2500/B150-3000/B200 H6



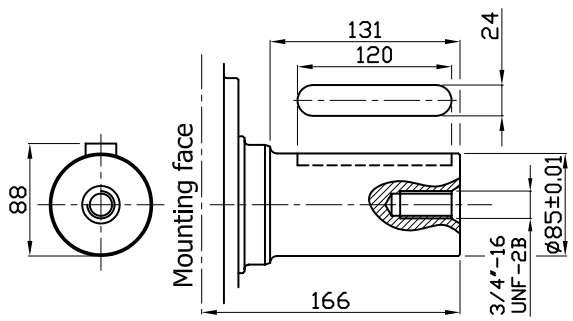
SHAFT

IAM 2200/B125-2500/B150-3000/B200 H6

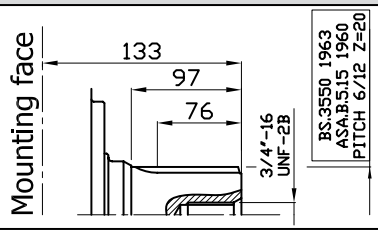
A0: Standard splined shaft



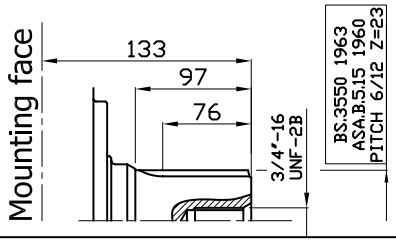
A2: Parallel shaft on request



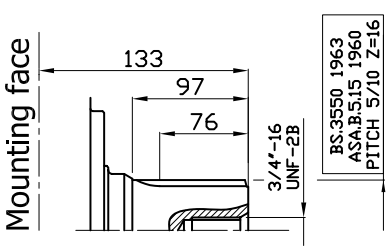
A1:
Splined Shaft
on request



A11:
Splined Shaft
on request



A12:
Splined Shaft
on request



ORDERING INSTRUCTIONS

IAM | - - - | - - - | H6 | A - | D - - | - - - | SB -

Motor model
IAM

Displacement

Interchangeability

- /C
- /B125 (2200/B125)
- /B150 (2500/B150)
- /B200 (3000/B200)

Housing

Shaft

- A0 standard splined shaft
- A1 splined shaft
- A2 parallel keyed shaft
- A3 female shaft
- A11 splined shaft
- A12 splined shaft
- A.. other shaft

Distributor

- D90 SAE CONFIGURATIONS

Tachometer

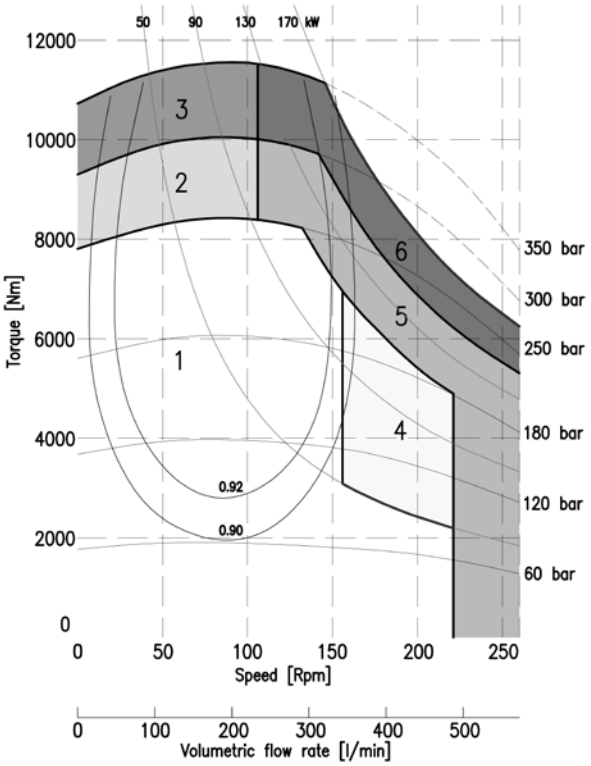
- TA
- TB
- EST
- EST.30
- J TACHOMETER PREDISPOSITION

Spline billet

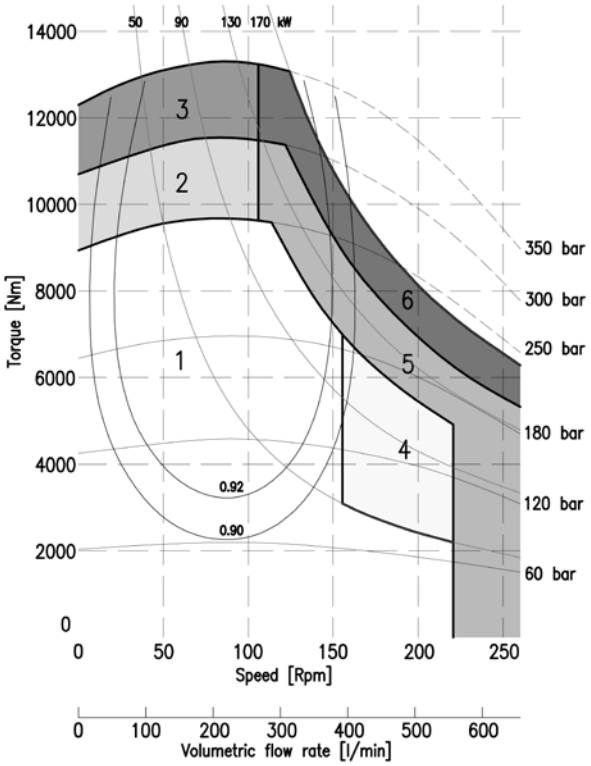
- SB9 82x92 UNI 221
- SB10 BS.3550.20T.6/12

EXAMPLE: IAM.2500.H6.A1.D90
IAM.2800.H6.A0.D90.TA.SB9
IAM.2500/C.H6.A2.D90.J

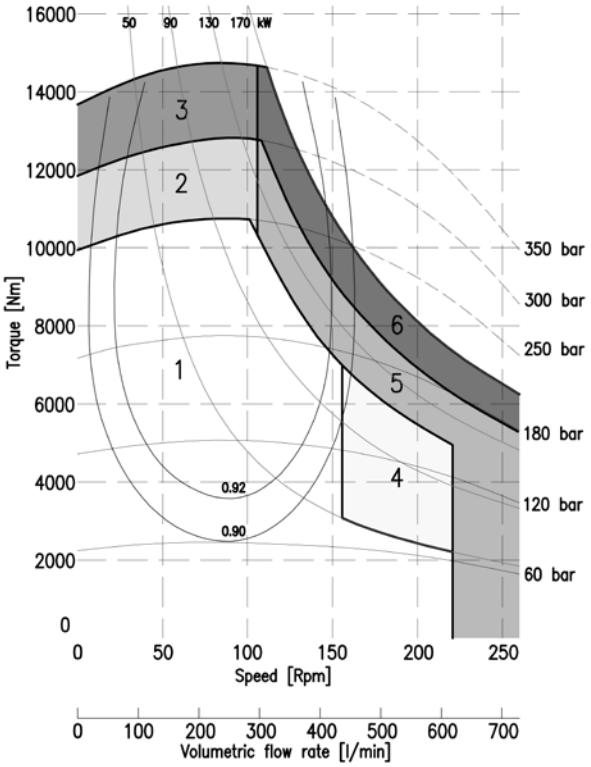
IAM 2200 H6



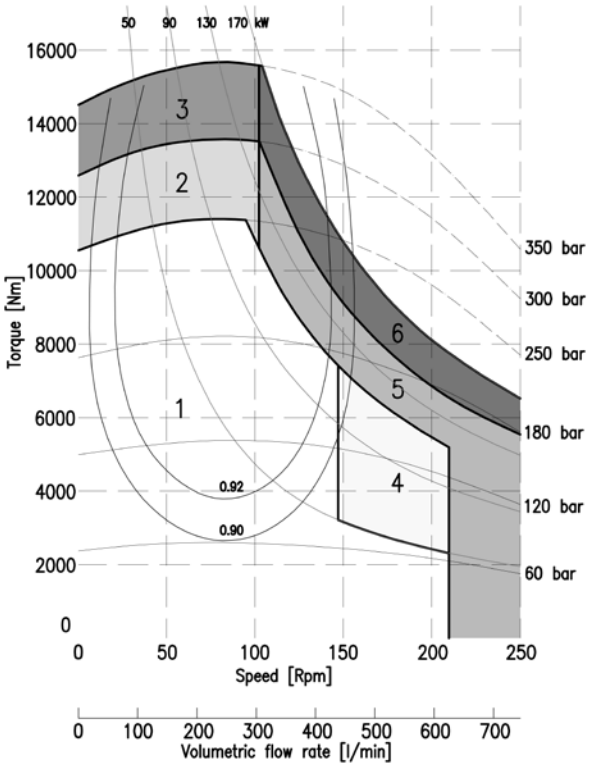
IAM 2500 H6



IAM 2800 H6

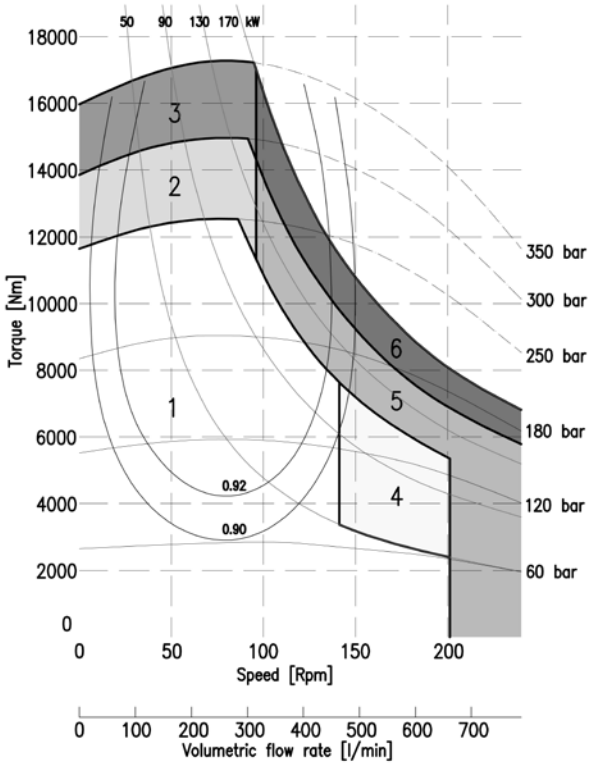


IAM 3000 H6

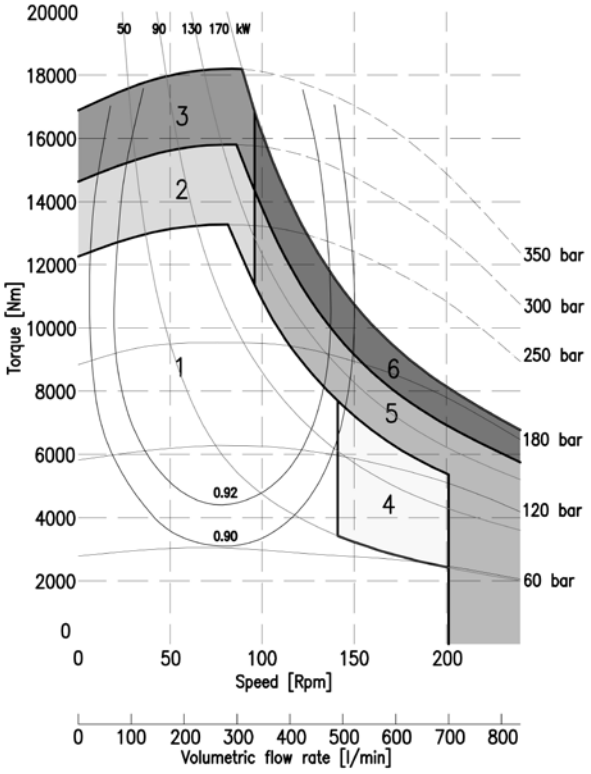


1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

IAM 3200 H6



IAM 3500 H6



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

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ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H7 MODEL

IAM 3900-4300-4600-5000-5400 H7

IAM 3900-4300-4600-5000-5400/C H7

INDEX

TECHNICAL DATA H7

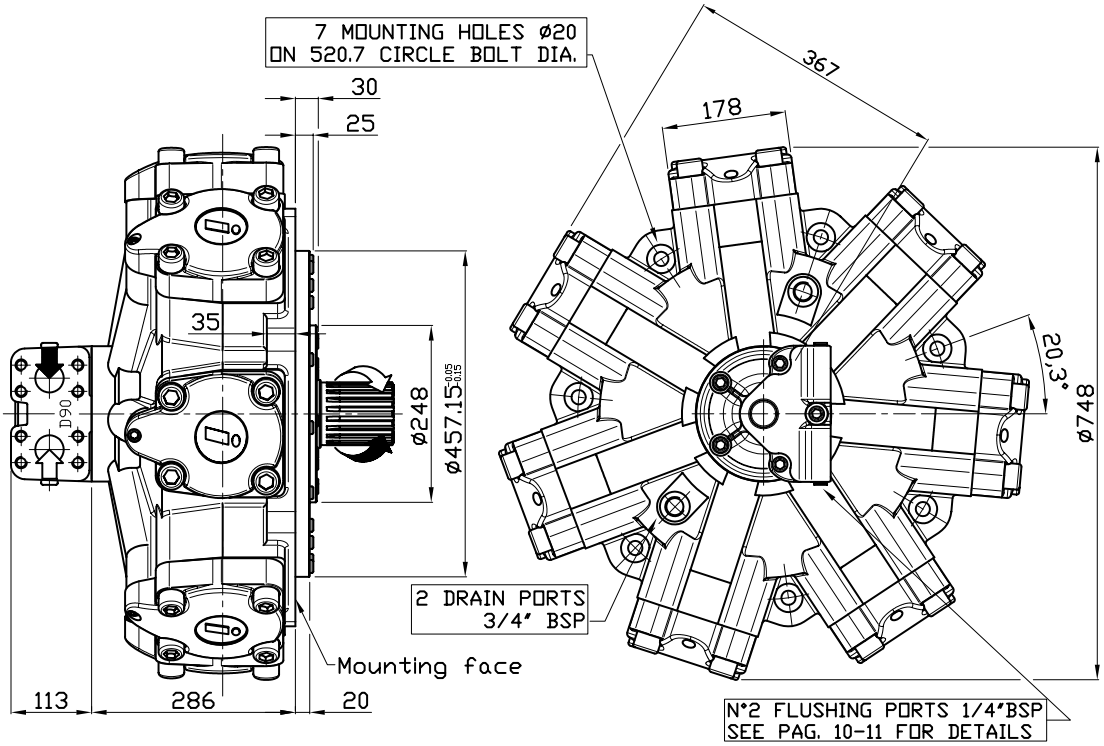
MODEL		IAM 3900 H7	IAM 4300 H7	IAM 4600 H7	IAM 5000 H7	IAM 5400 H7
Displacement	cc/rev	3907	4343	4616	5088	5384
Specific Torque	Nm/bar	62.2	69.1	73.5	81.0	85.7
Max cont. Pressure	bar	250	250	250	250	250
Max int. Pressure	bar	300	300	300	300	300
Peak pressure	bar	350	350	350	350	350
Max continuous speed	rpm	160	150	140	140	130
Peak speed	rpm	200	190	190	180	170
Max continuous power	HP	177	177	177	177	177
	kW	130	130	130	130	130
Max power	HP	241	241	241	241	241
	kW	180	180	180	180	180

- N° of pistons: 7
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 405 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 0.5 rpm
- Flushing flow: 20 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

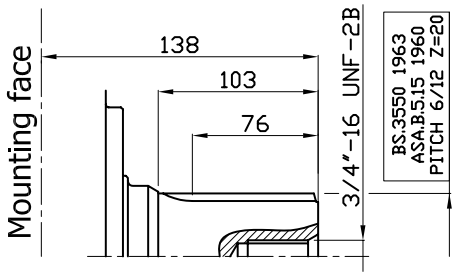
IAM 3900-4300-4600-5000-5400 H7



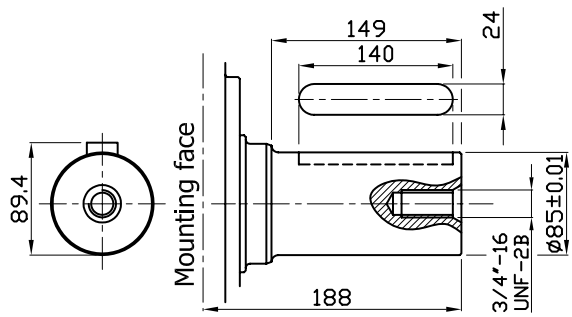
SHAFT

IAM 3900-4300-4600-5000-5400 H7

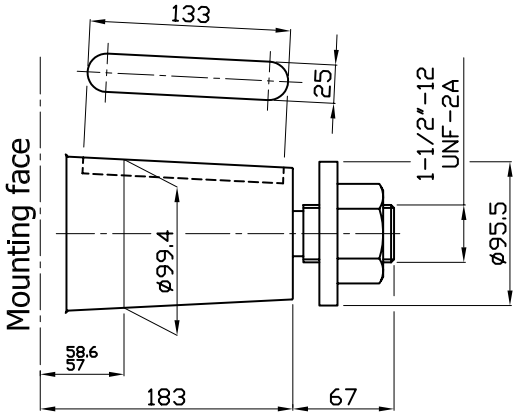
A1: Standard splined shaft



A2: Parallel shaft on request

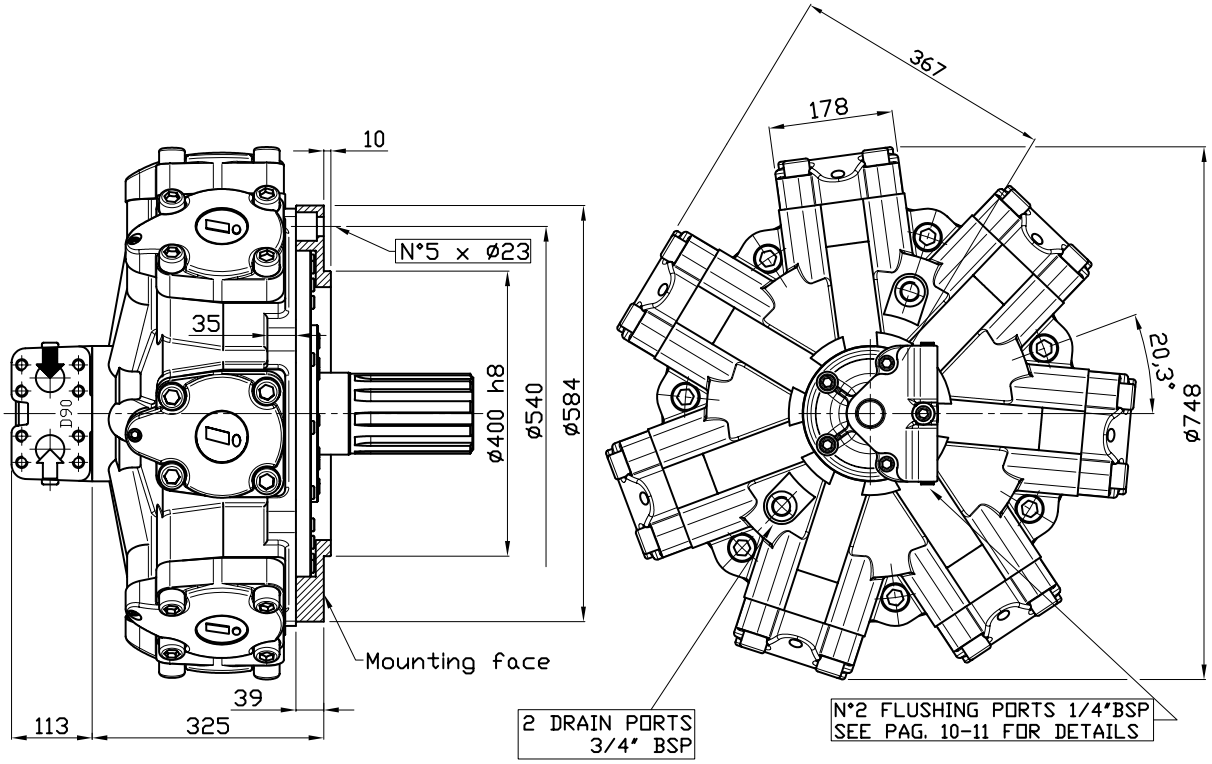


A4: Taper shaft on request



SIZE

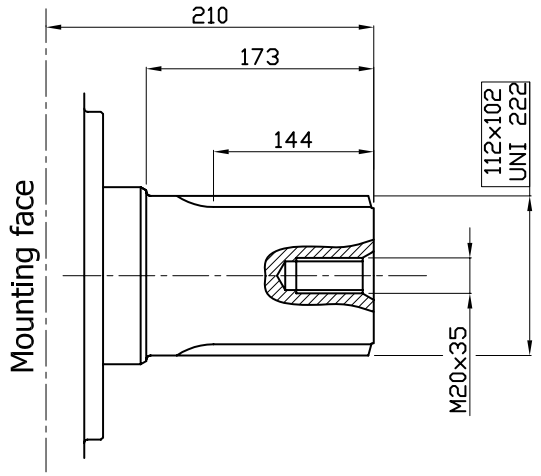
IAM 3900/C-4300/C-4600/C-5000/C-5400/C H7



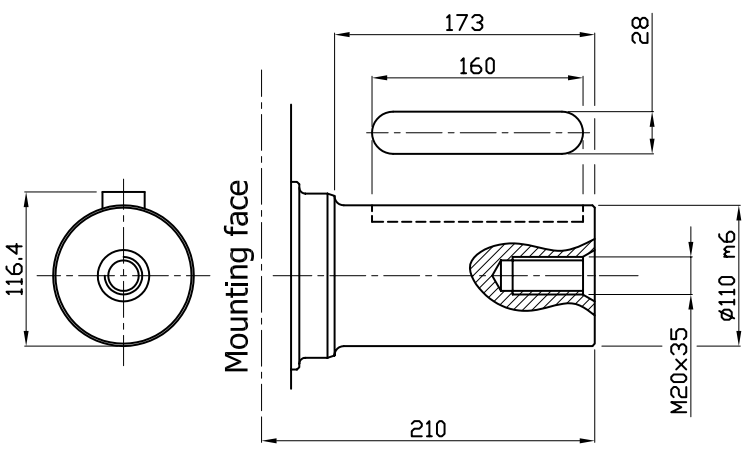
SHAFT

IAM 3900/C-4300/C-4600/C-5000/C-5400/C H7

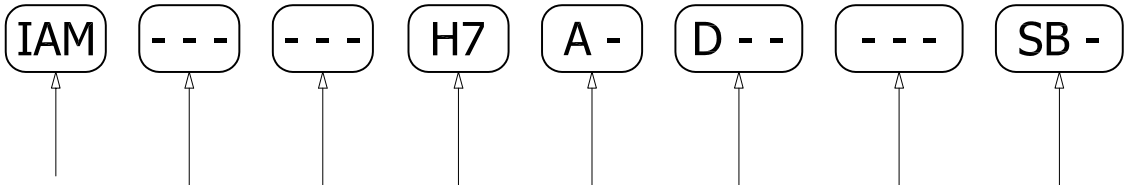
A0: Standard splined shaft



A2: Parallel shaft on request



ORDERING INSTRUCTIONS



Motor model
IAM

Displacement

Interchangeability
- /C

Housing

Shaft
- A0 standard splined shaft
- A1 splined shaft
- A2 parallel keyed shaft
- A4 tapered shaft
- A.. other shaft

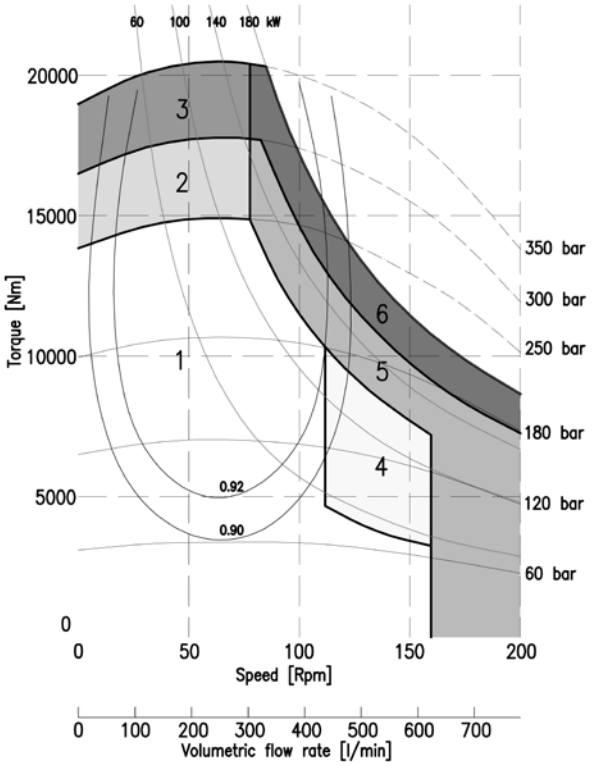
Distributor
- D90 SAE CONFIGURATIONS

Tachometer
- TA
- TB
- EST
- EST.30
- J TACHOMETER PREDISPOSITION

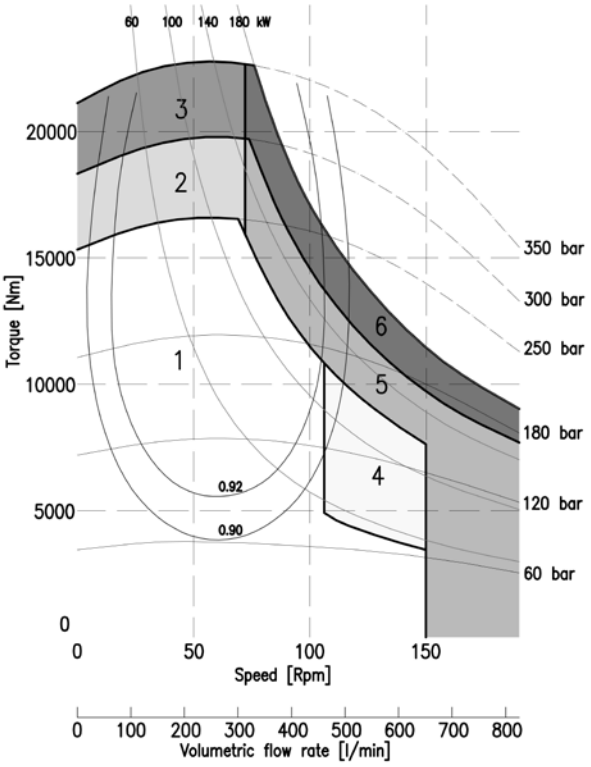
Spline billet
- SB10 BS.3550.20T.6/12
- SB11 102x112 UNI 222

EXAMPLE:
IAM.3900.H7.A1.D90
IAM.4600.H7.A1.D90.TA.SB10
IAM.5400/C.H7.A2.D90.J

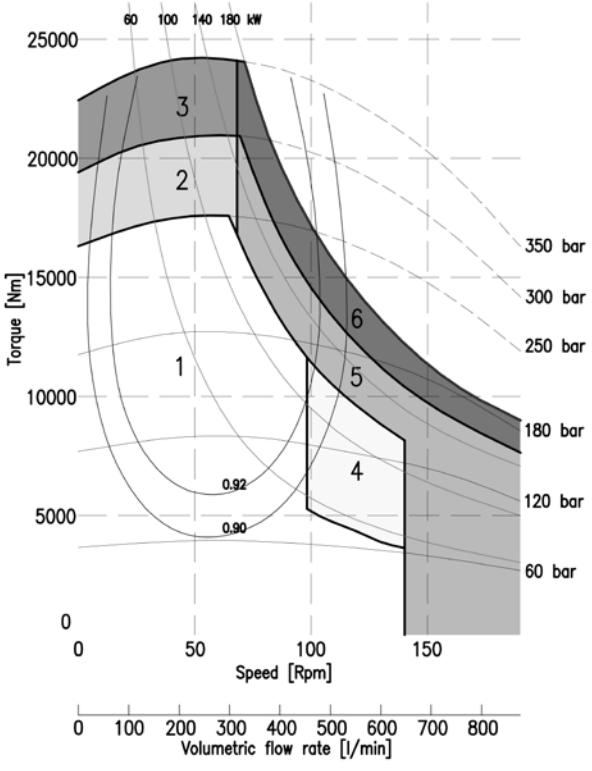
IAM 3900 H7



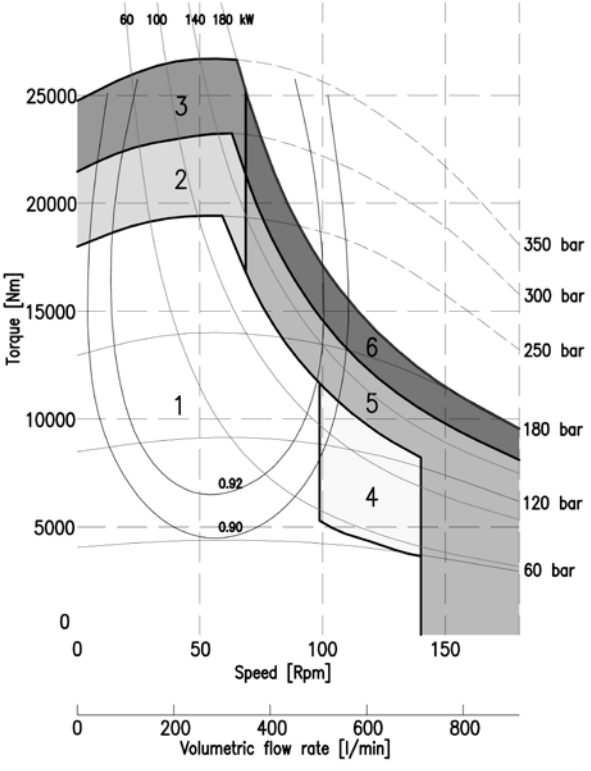
IAM 4300 H7



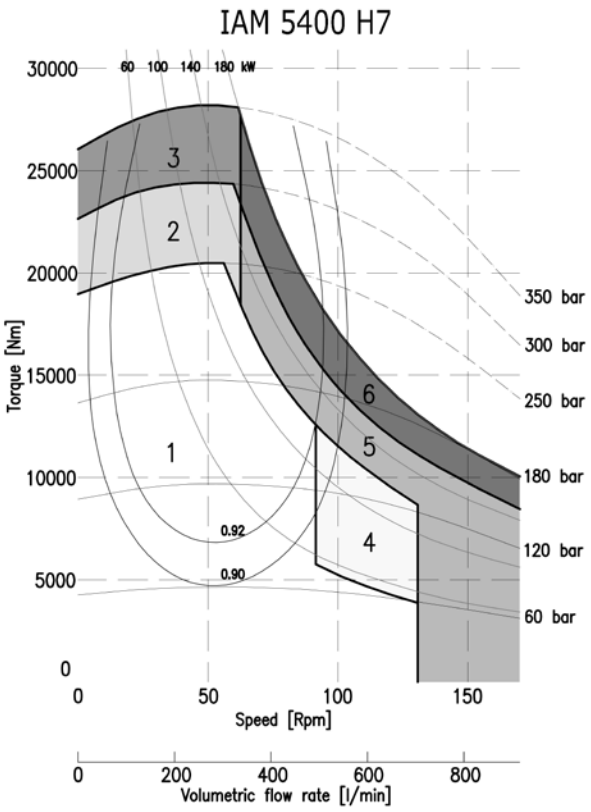
IAM 4600 H7



IAM 5000 H7



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)

4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

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ITALGROUP - ADVANCED - MOTORS
IAM SERIES
H8 MODEL

IAM 6000-6500-6800-7600-8000 H8

IAM 6000-6500-6800-7600-8000 H8

INDEX

TECHNICAL DATA H8

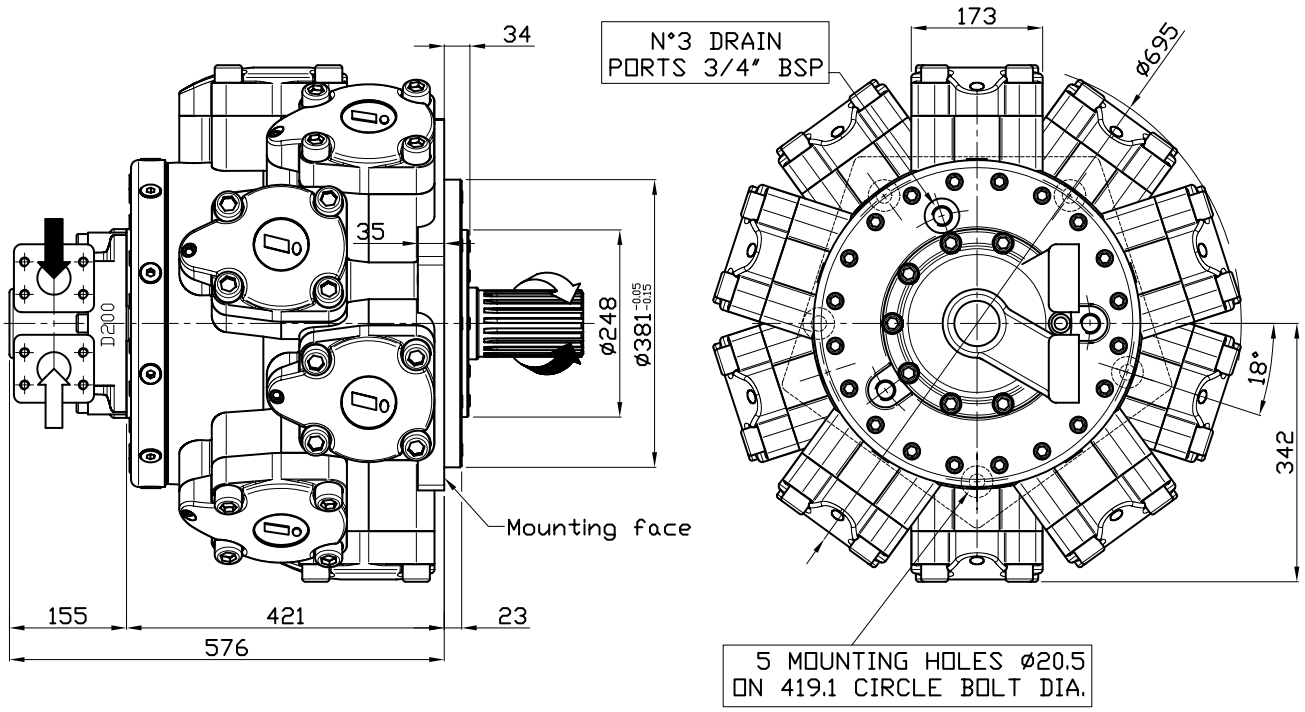
MODEL		IAM 6000 H8	IAM 6500 H8	IAM 6800 H8	IAM 7600 H8	IAM 8000 H8
Displacement	cc/rev	5966	6581	6962	7620	8062
Specific Torque	Nm/bar	95.0	104.7	110.8	121.3	128.3
Max cont. Pressure	bar	250	250	250	190	180
Max int. Pressure	bar	290	290	290	230	220
Peak pressure	bar	320	320	320	280	270
Max continuous speed	rpm	120	120	120	90	80
Peak speed	rpm	140	140	140	100	90
Max continuous power	HP	183	183	183	177	177
	kW	135	135	135	130	130
Max power	HP	255	255	255	241	241
	kW	190	190	190	180	180

- N° of pistons: 10
- Max case pressure: 6 bar
- Max back pressure: 70 bar
- Dry weight: 590 kg
- Temperature range: -30°C ÷ +70°C
- Minimum speed: 0.5 rpm
- Flushing flow: 20 l/min

(*)for further details regarding flushing go to page 10 of this catalogue.

SIZE

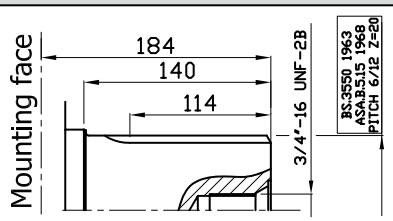
IAM 6000-6500-6800-7600-8000 H8



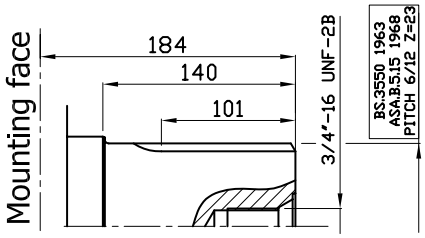
SHAFT

IAM 6000-6500-6800-7600-8000 H8

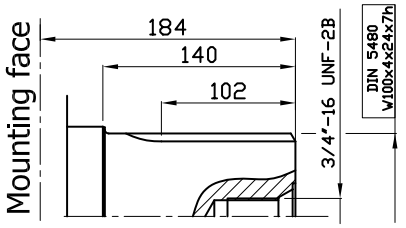
A1:
Standard Splined Shaft



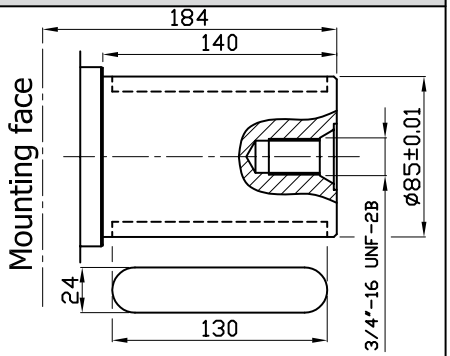
A11:
Splined Shaft on request



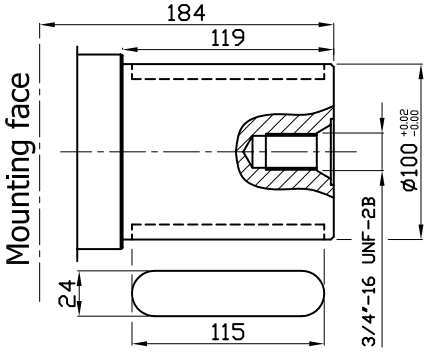
A5:
Splined Shaft on request



A2:
Parallel Shaft on request

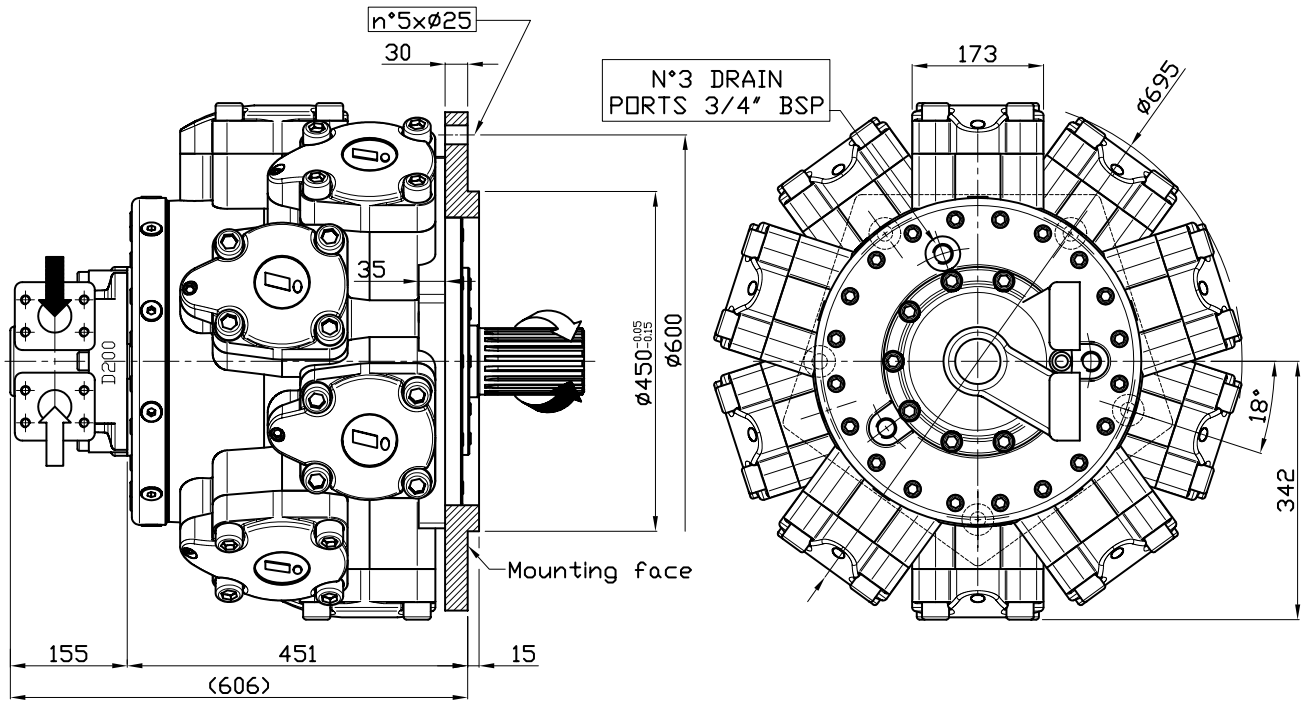


A22:
Parallel Shaft on request



SIZE

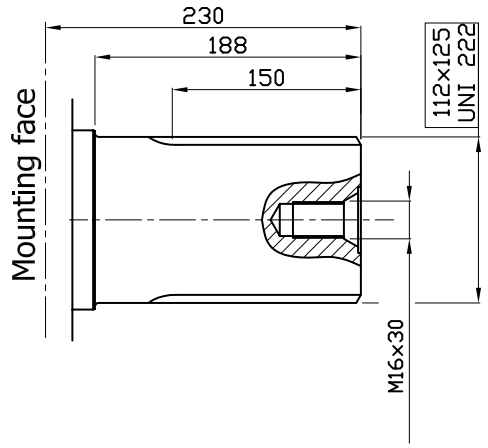
IAM 6000/C-6500/C-6800/C-7600/C-8000/C H8



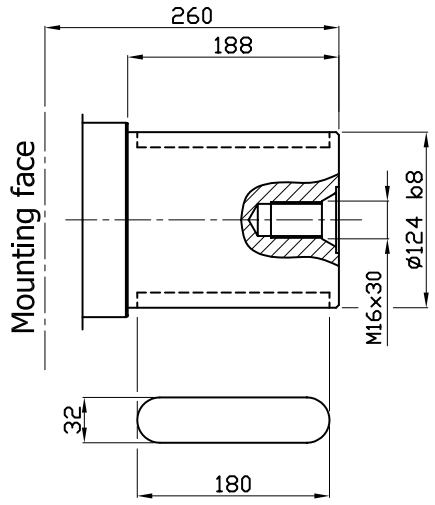
SHAFT

IAM 6000/C-6500/C-6800/C-7600/C-8000/C H8

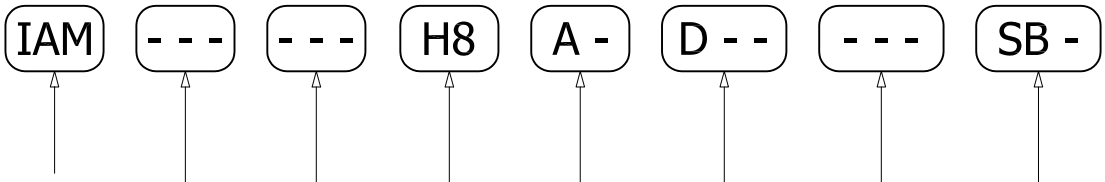
A0: Standard splined shaft



A2: Parallel shaft on request



ORDERING INSTRUCTIONS



Motor model
IAM

Displacement

Interchangeability
/C

Housing

Shaft

A0	standard splined shaft
A1	splined shaft
A11	splined shaft
A2	parallel keyed shaft
A22	parallel keyed shaft
A5	splined DIN shaft
A..	other shaft

Distributor

D200	SAE CONFIGURATIONS

Tachometer

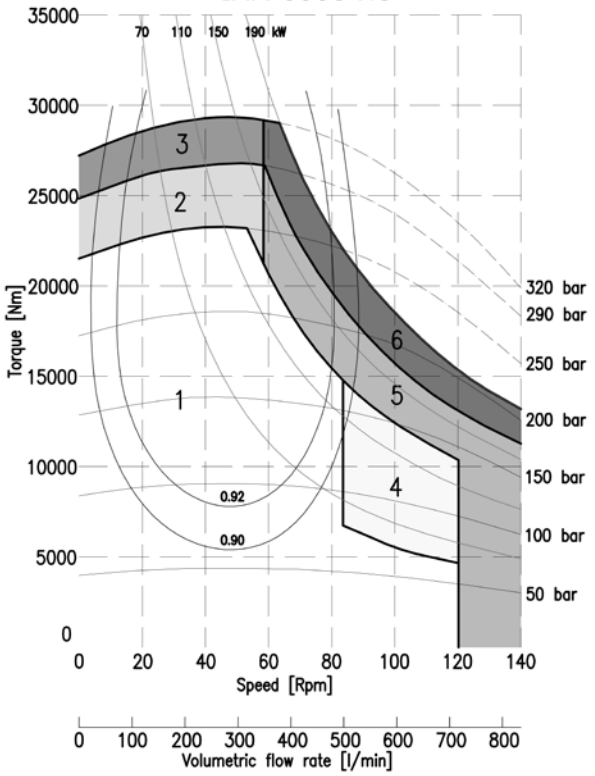
TA	
TB	
EST	
EST.30	
J	TACHOMETER PREDISPOSITION

Spline billet

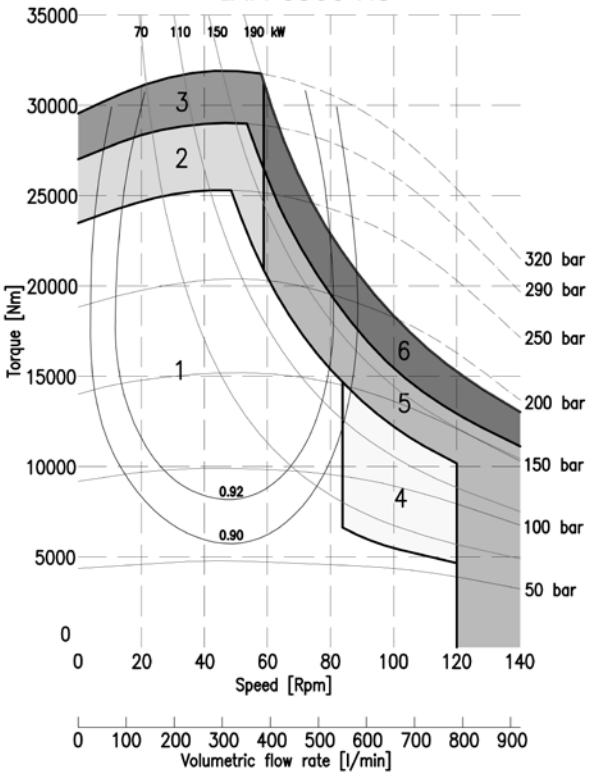
SB10	BS.3550.20T.6/12
SB12	112x125 UNI 222

EXAMPLE:
IAM.6000.H8.A1.D200
IAM.6800.H8.A1.D200.TA.SB10
IAM.8000/C.H8.A0.D200.J

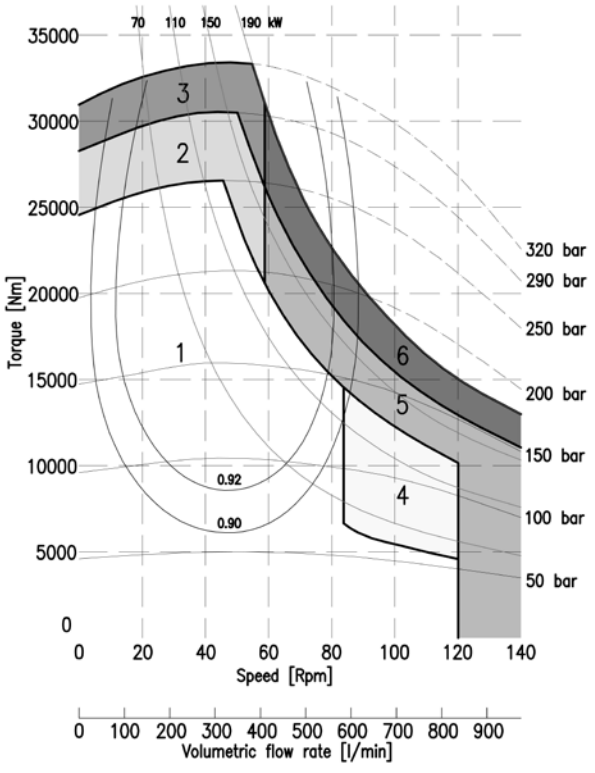
IAM 6000 H8



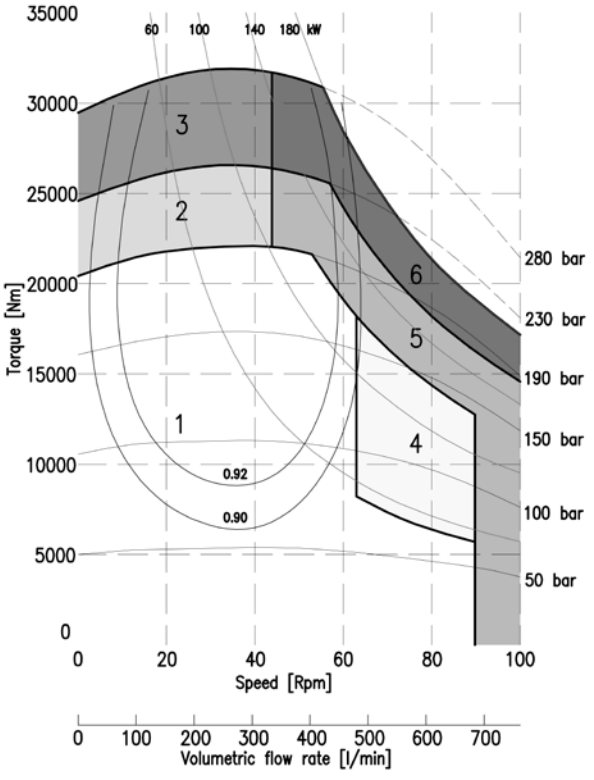
IAM 6500 H8



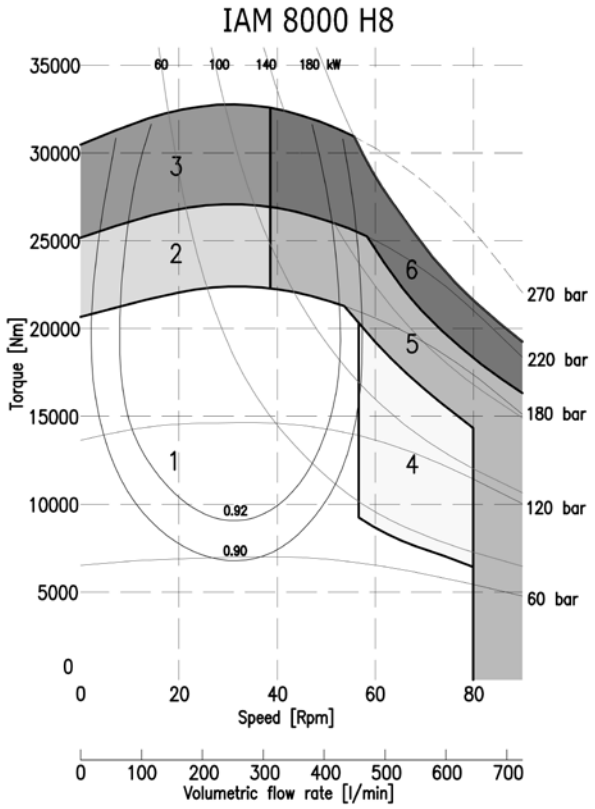
IAM 6800 H8



IAM 7600 H8



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing



1	Continuous operation
2	Intermittent operation for period 3-5 minutes every 10-15 minutes
3	Intermittent operation for very short period (3-5 seconds every 10-15 minutes)
4	Continuous operation with flushing
5	Intermittent operation for period 3-5 minutes every 10-15 minutes with flushing
6	Intermittent operation for very short period (3-5 seconds every 10-15 minutes) with flushing

Italgroup®
HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
FLOW DISTRIBUTORS

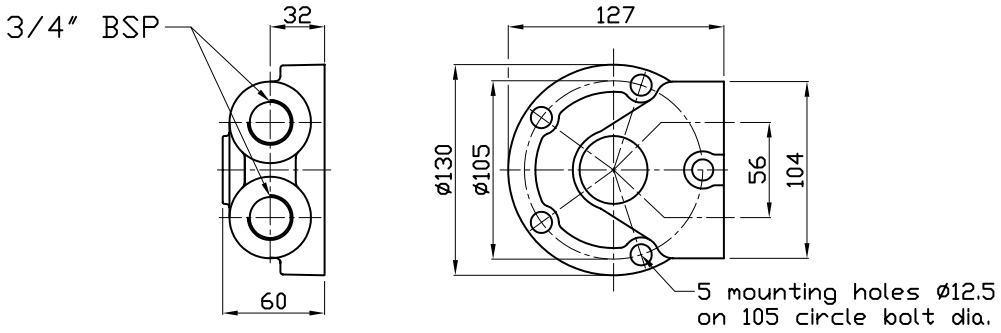
D31-D310-D40-D47-D55-
D75-D90-D200

INDEX

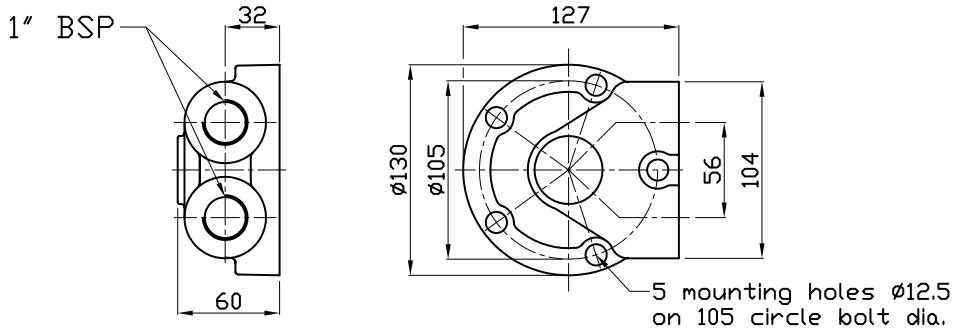
DISTRIBUTOR

BSP CONFIGURATION

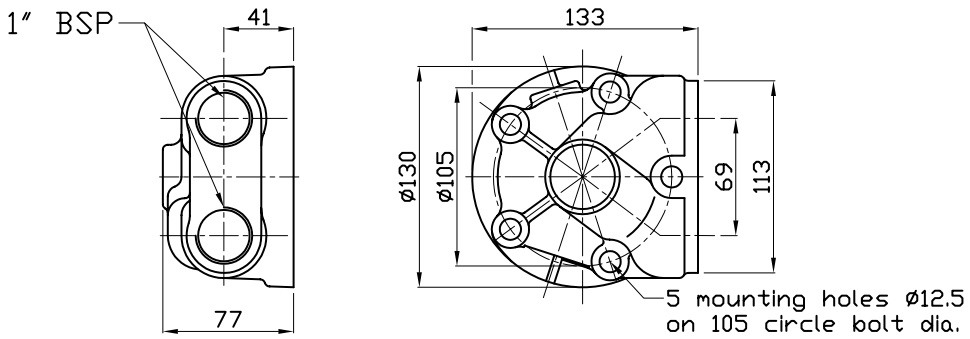
D31



D310

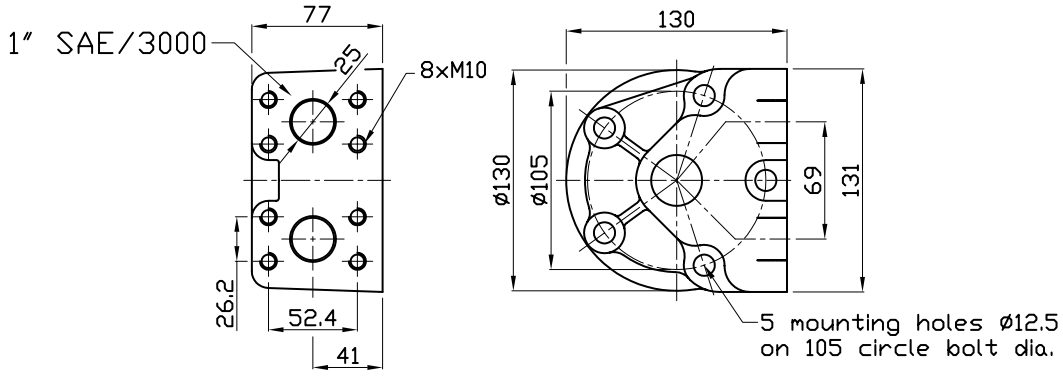


D40



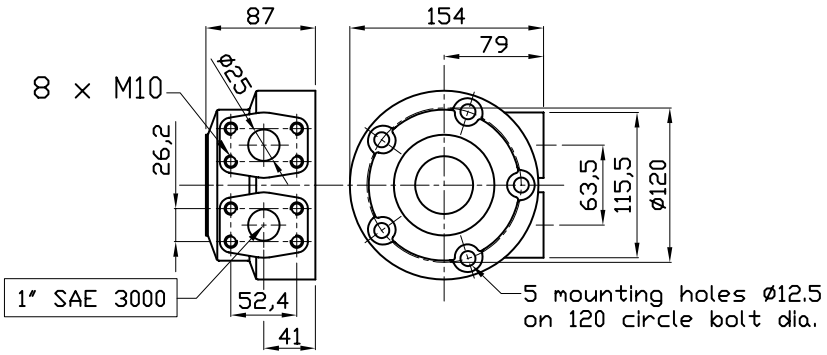
SAE CONFIGURATION

D47

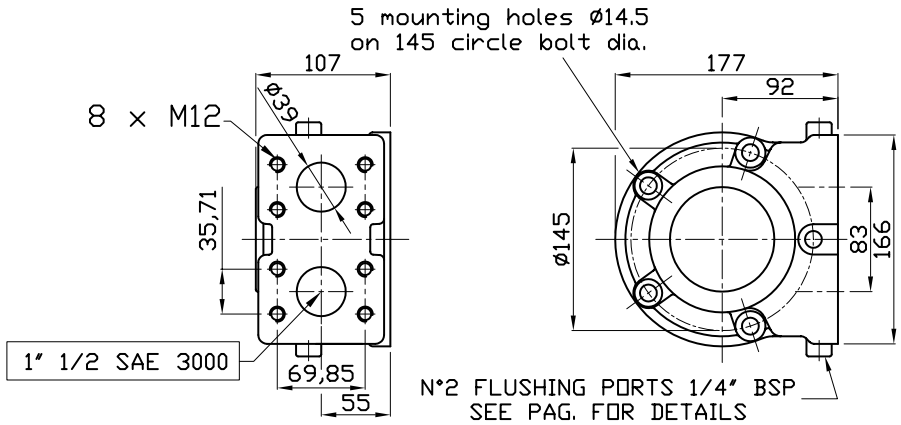


SAE CONFIGURATION

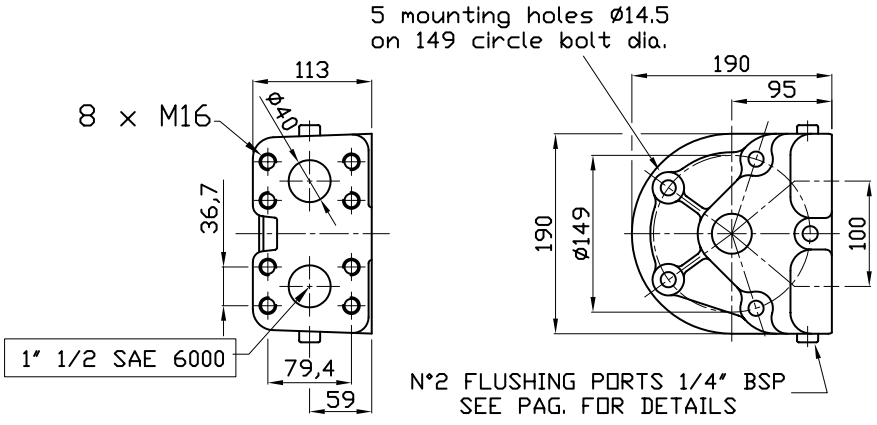
D55



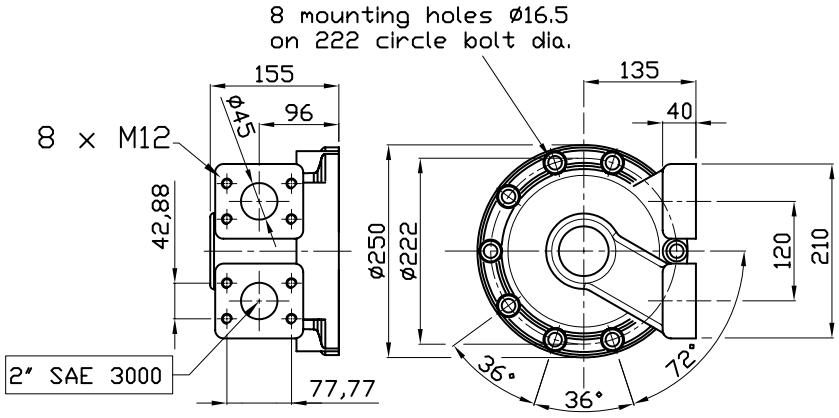
D75



D90



D200



Italgroup®
HYDRAULIC MOTORS
ITALY

ITALGROUP - ADVANCED - MOTORS
IAM SERIES
ACCESSORIES

VALVES:

RVDA SERIES
OVSA SERIES
OVDA SERIES
ORVSA SERIES
RVDAP SERIES

TACHOMETER

SPLINE BILLET

CONVERSION FLANGES

INDEX

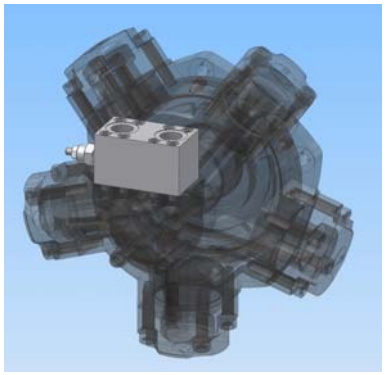
ITALGROUP VALVES GENERAL INFORMATION

ITALGROUP can suppl y a wide range of fla ngeable va lves, that can be easily mounte d on ITALGROUP hydraulic motors.

OVERCENTER VALVE

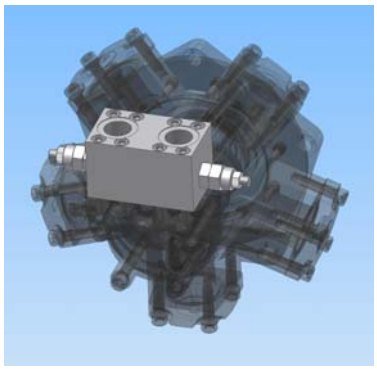
The overcenter valves are required when static and dynamic control is needed.

Single overcenter valve



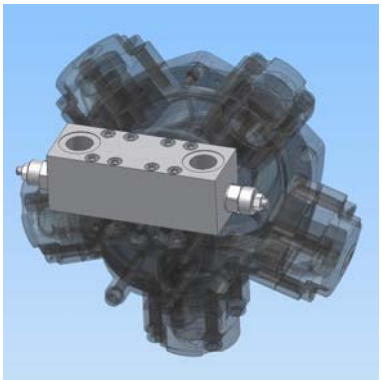
The single overcenter valve (OVSA) is used for unidirectional loads. The single overcenter valve can be suppli ed with an integrat ed relief valve too (ORVSA serie).

Dual overcenter valve



The dual overcenter valve (OVDA) is used for bidirectional loads.

DUAL RELIEF VALVE

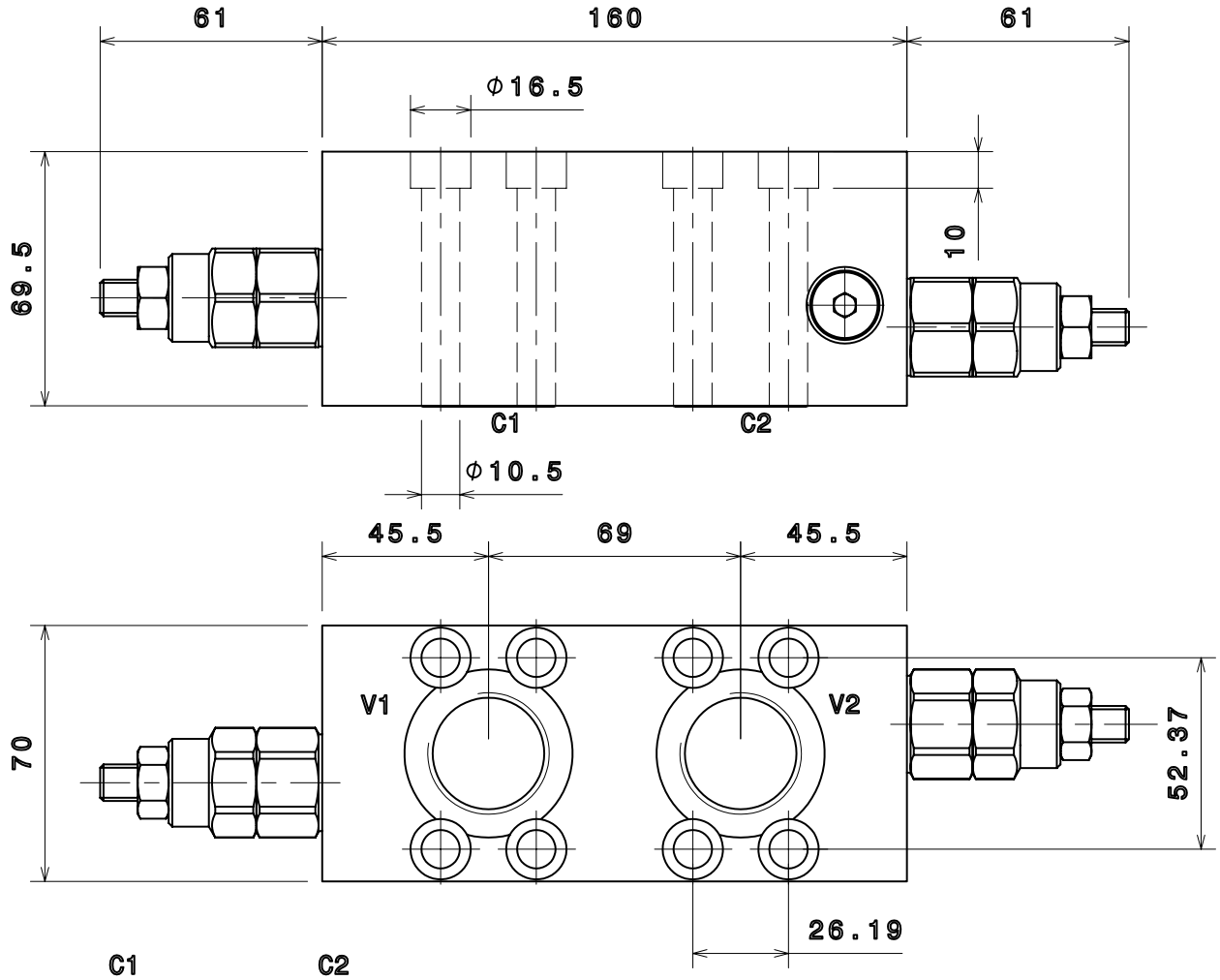


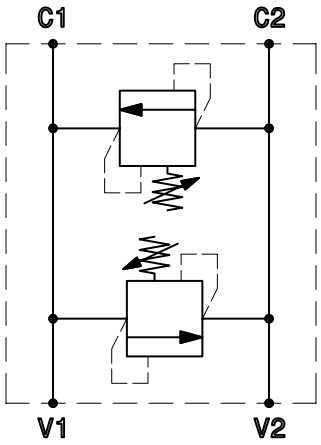
The dua l cross over relief val ve (RVDA) is used to a void motor pressure peaks. T he maximum pressure can be set adjusting the relief valve screw. The dual cros s relief valve can be suppl ied with an inte grated flus hing valve (RVDAP serie).

On request, the RVDA valves can be mounted together with OVSA or OVDA valves. For further details please contact Italgroup S.r.l. technical departement.

SIZE AND TECHNICAL DATA

RVDA 80 — RVDA SERIES





PORTS DIMENSION	
V1,V2	1" BSPP
C1,C2	O–ring 2–125

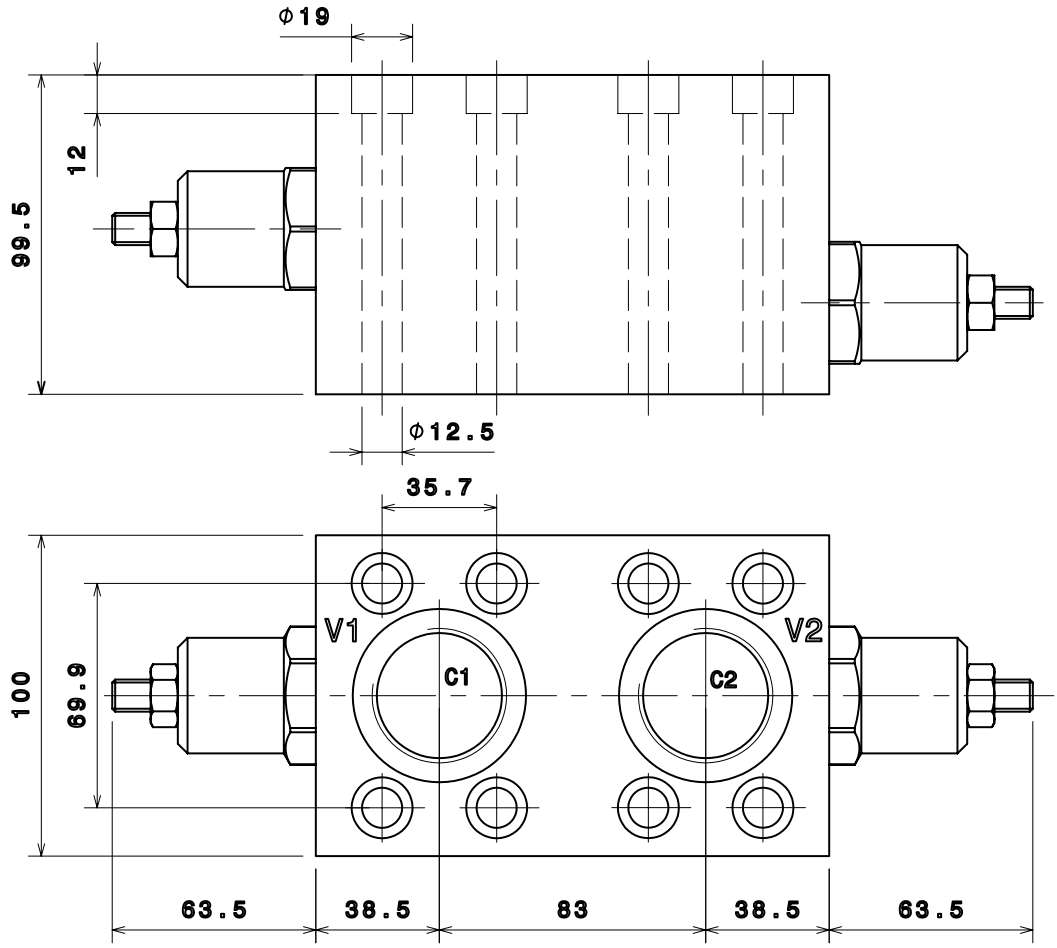
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Maximum pressure		300 bar
Maximum flow rate		80 l/min
Relief valve setting range	A	20–100 bar
		standard setting 80 bar
	B	40–250 bar
		standard setting 180 bar
	C	60–350 bar
		standard setting 250 bar

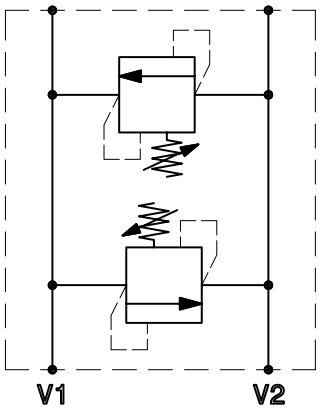
Italgroup distributor fitting

D47

SIZE AND TECHNICAL DATA

RVDA 200 — *RVDA SERIES*





PORTS DIMENSION	
V1,V2	1"1/4 BSPP
C1,C2	O–Ring 2–224

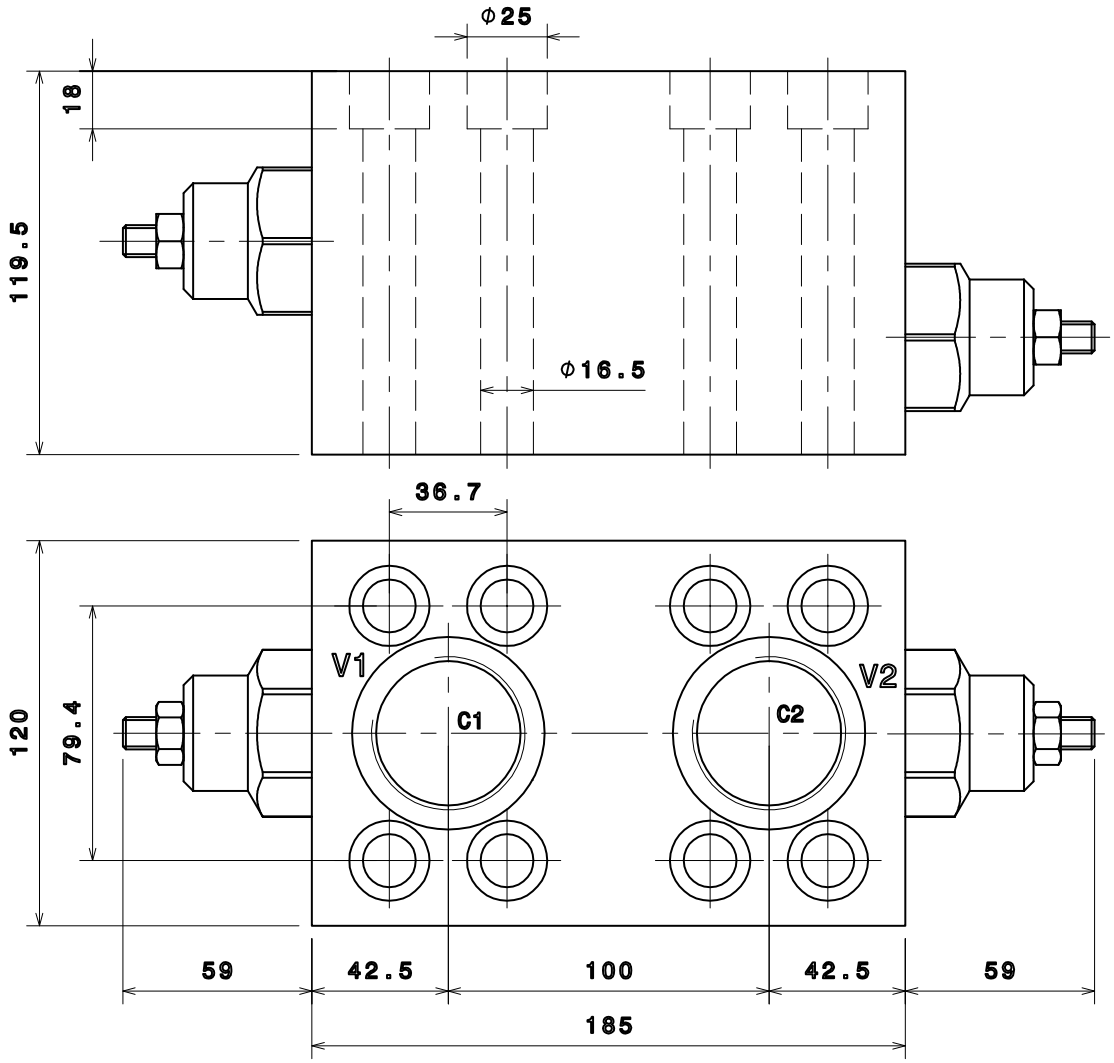
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Maximum pressure		300 bar
Maximum flow rate		200 l/min
Relief valve setting range	A	20–100 bar
		standard setting 80 bar
	B	40–250 bar
		standard setting 180 bar
	C	60–350 bar
		standard setting 250 bar

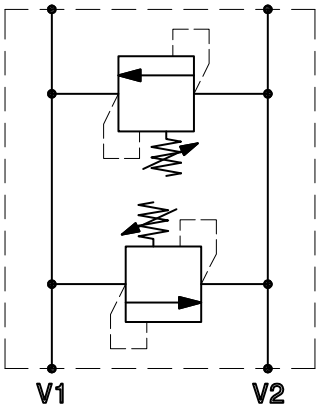
Italgroup distributor fitting

D75

SIZE AND TECHNICAL DATA

RVDA 380 — *RVDA SERIES*





PORTS DIMENSION	
V1,V2	1"1/2 BSPP
C1,C2	O–Ring 2–225

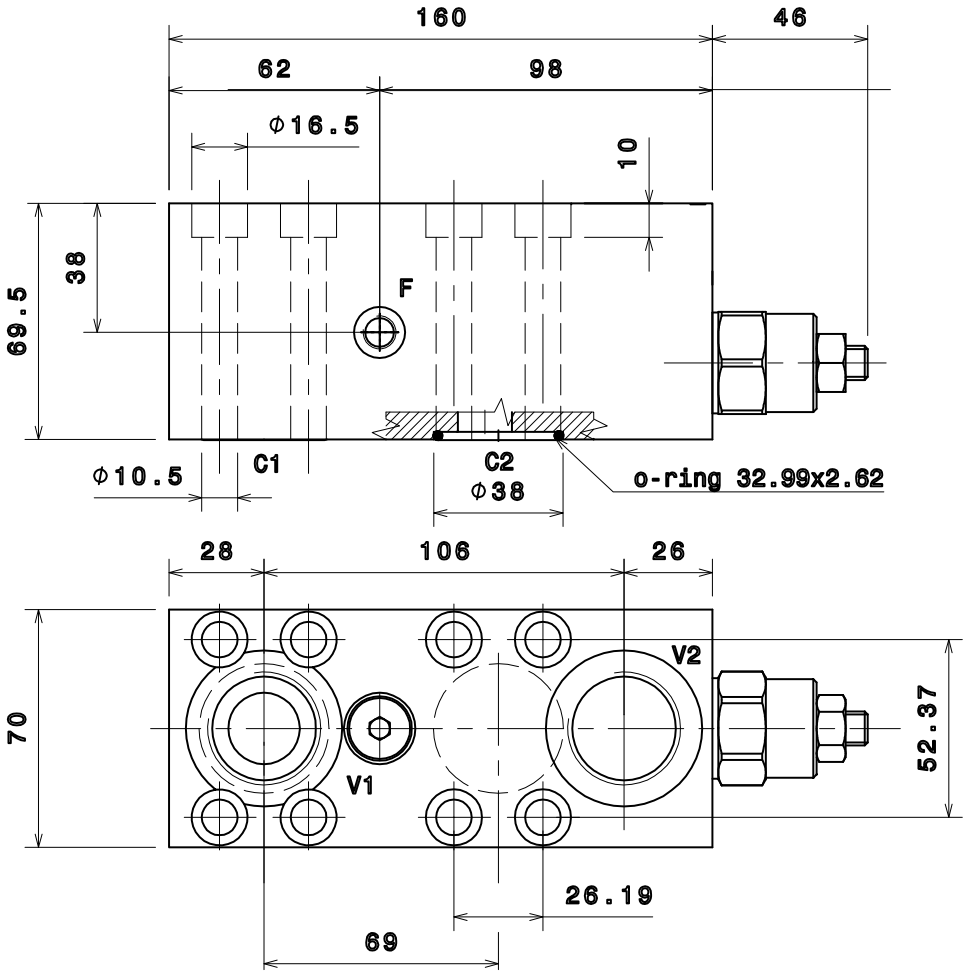
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Maximum pressure		300 bar
Maximum flow rate		380 l/min
Relief valve setting range	A	20–100 bar
		standard setting 80 bar
	B	40–250 bar
		standard setting 180 bar
	C	60–350 bar
		standard setting 250 bar

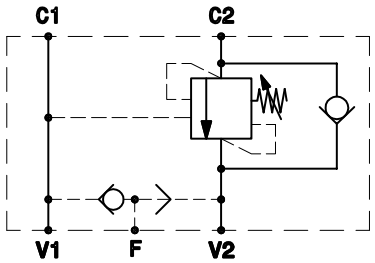
Italgroup distributor fitting

D90

SIZE AND TECHNICAL DATA

OVSA 160 — OVSA SERIES





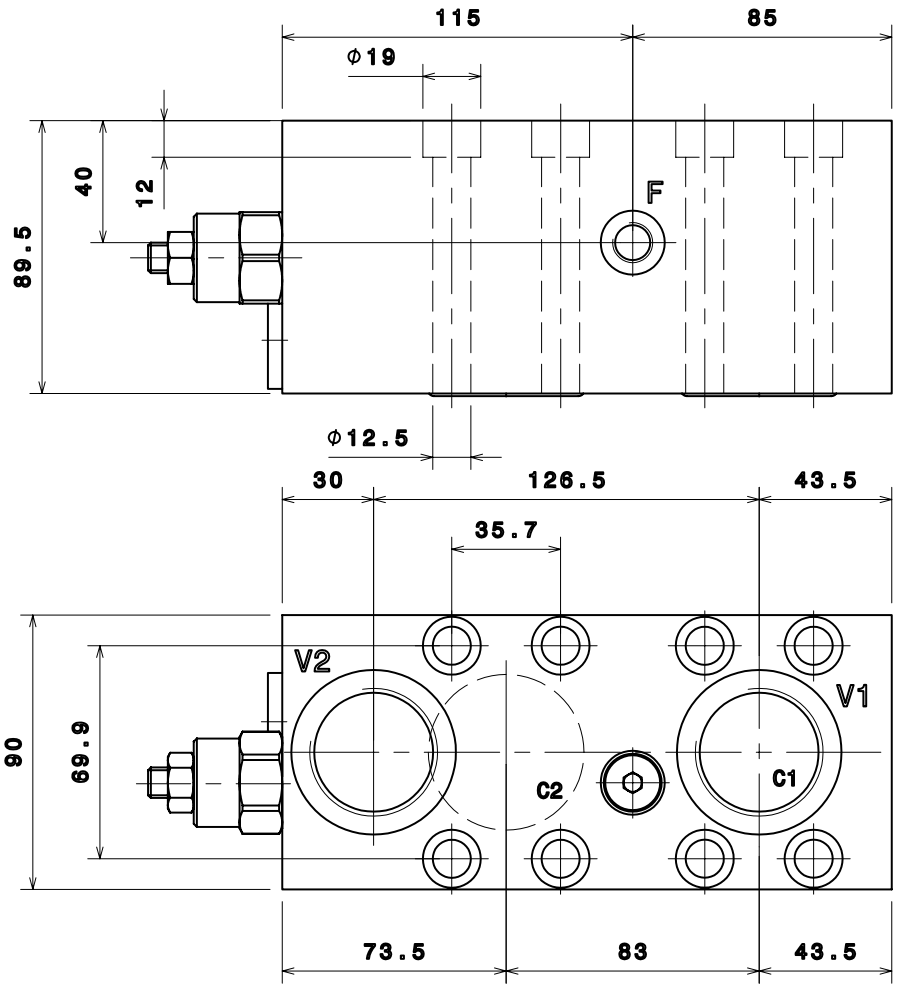
PORTS DIMENSION	
V1,V2	1" BSPP
C1,C2	O-ring 2-125
F	1/4" BSPP

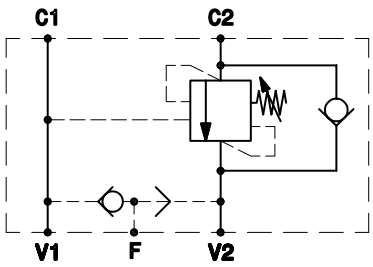
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		270 bar
Maximum flow rate		150 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
Relief valve setting range	A	20-200 bar
		standard setting 100 bar
	B	50-350 bar
		standard setting 280 bar

Italgroup distributor fitting
D47

SIZE AND TECHNICAL DATA

OVSA 300 — OVSA SERIES





PORTS DIMENSION	
V1,V2	1"1/4 BSPP
C1,C2	O–Ring 2–224
F	1/4" BSPP

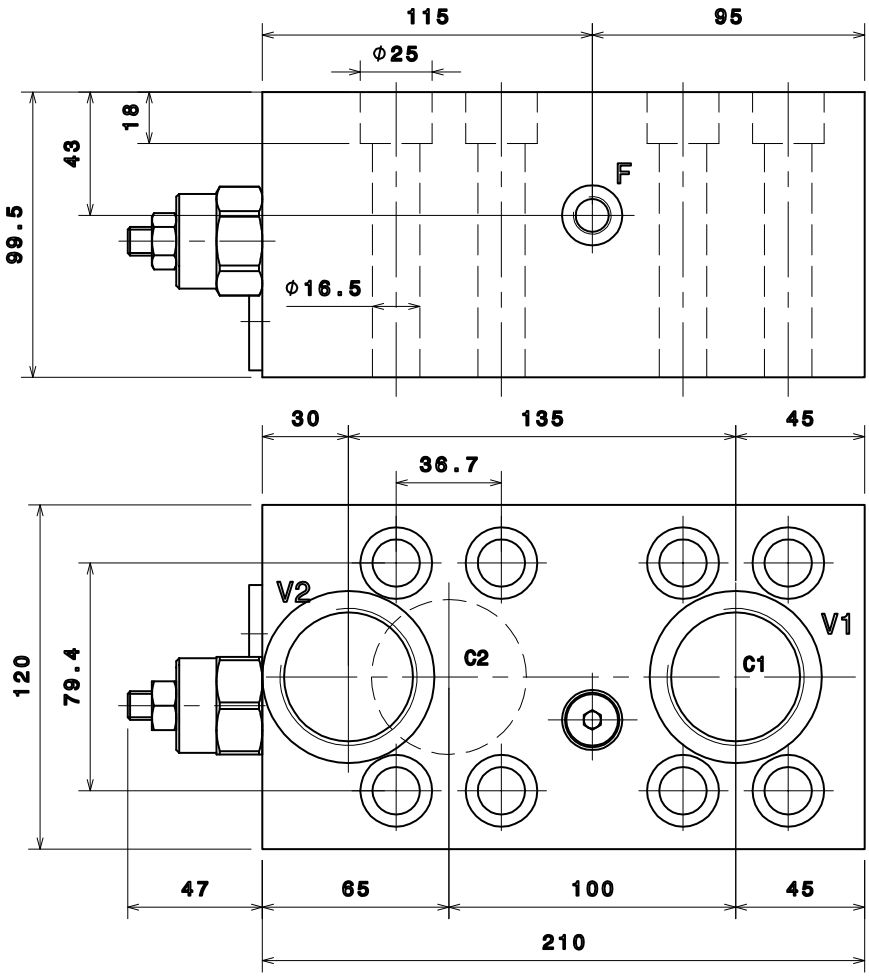
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		300 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
Relief valve setting range	A	20–200 bar
		standard setting 100 bar
	B	50–350 bar
		standard setting 280 bar

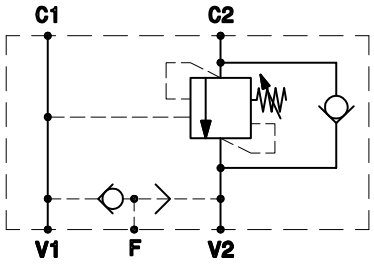
Italgroup distributor fitting

D75

SIZE AND TECHNICAL DATA

OVSA 480 — OVSA SERIES





PORTS DIMENSION	
V1,V2	1"1/2 BSPP
C1,C2	O-Ring 2-225
F	1/4" BSPP

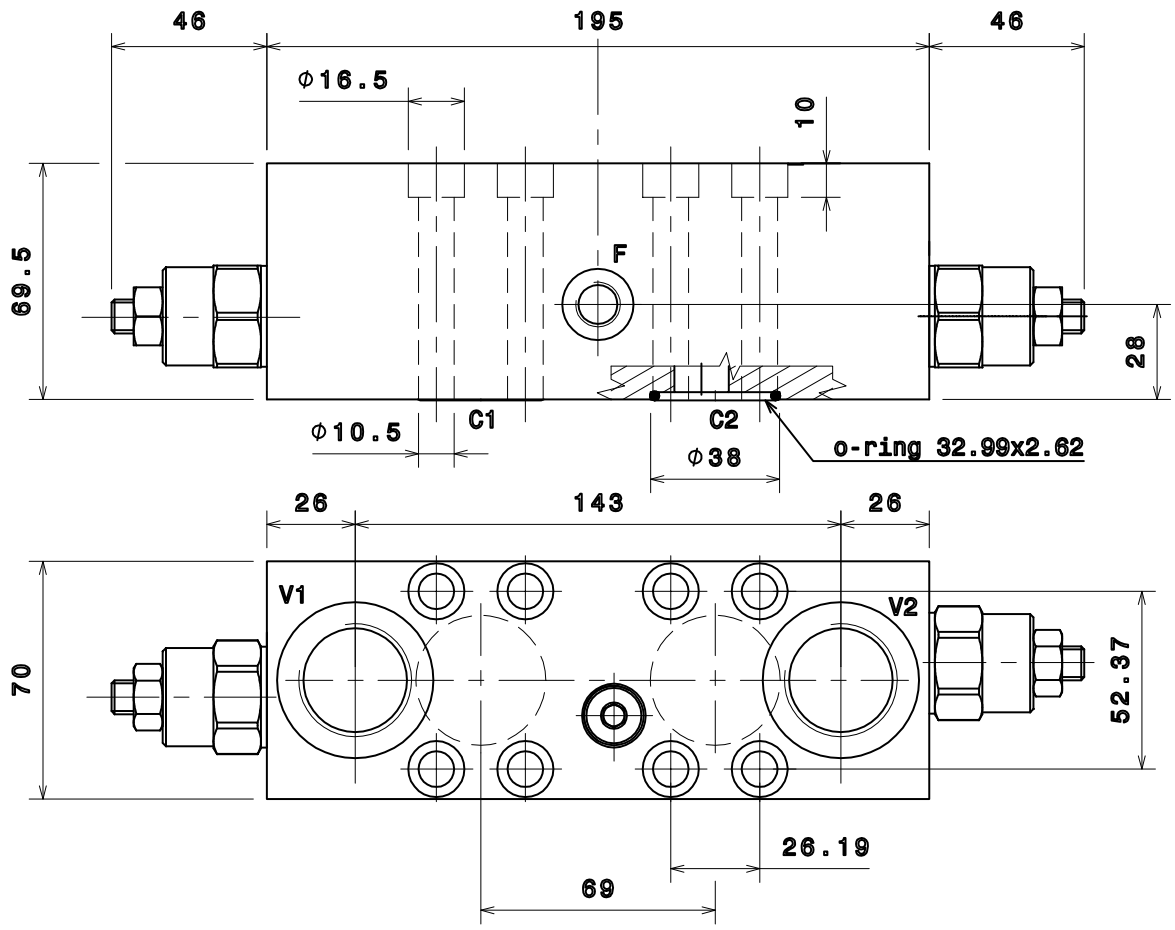
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		480 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
Relief valve setting range	A	20-200 bar
		standard setting 100 bar
	B	50-350 bar
		standard setting 280 bar

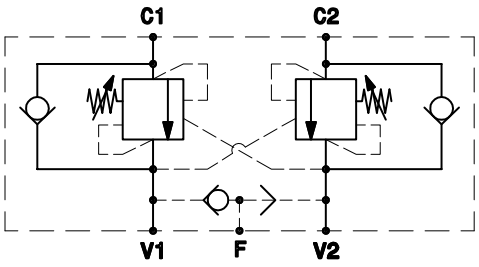
Italgroup distributor fitting

D90

SIZE AND TECHNICAL DATA

OVDA 160 — OVDA SERIES





PORTS DIMENSION	
V1,V2	1" BSPP
C1,C2	O-ring 2-125
F	1/4" BSPP

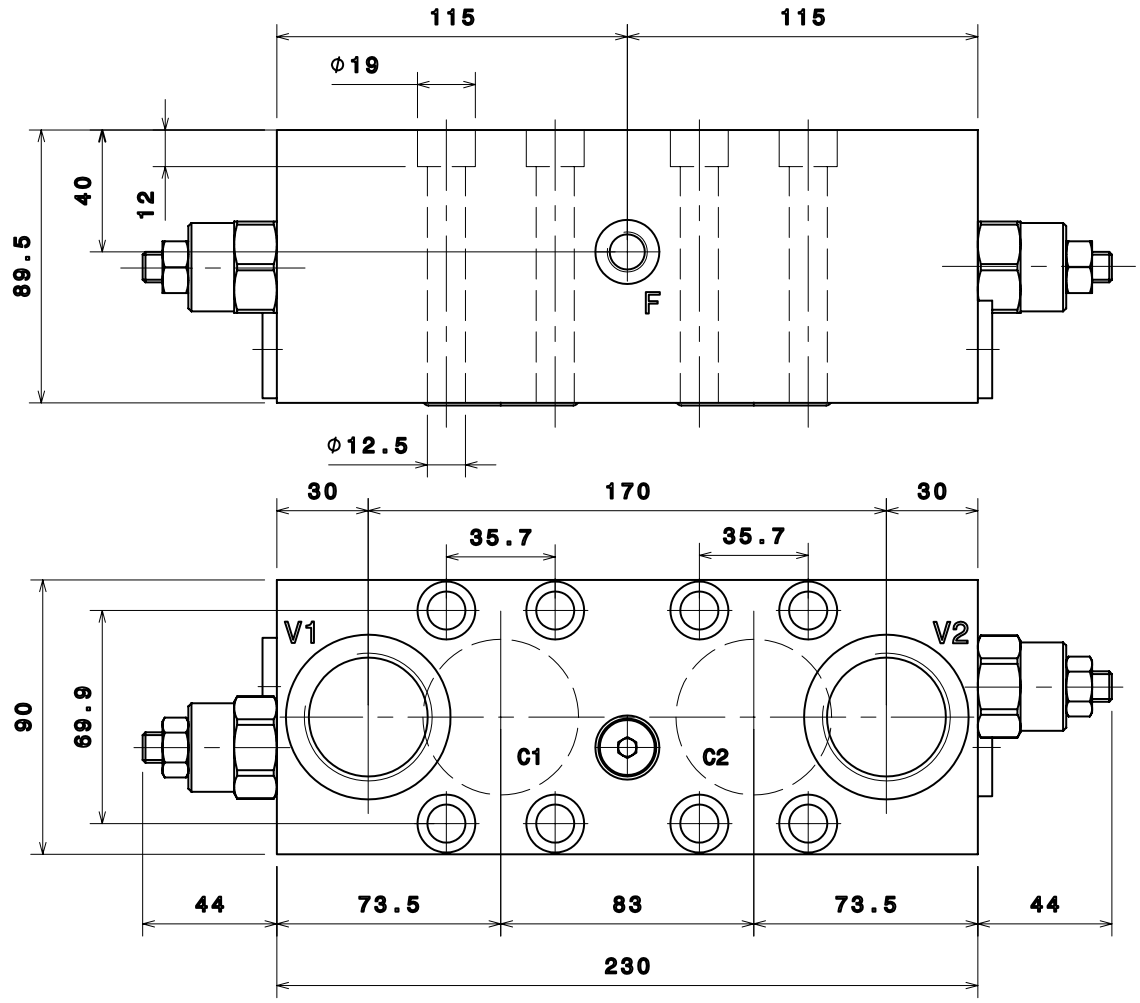
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		270 bar
Maximum flow rate		150 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
Relief valve setting range	A	20-200 bar
		standard setting 100 bar
	B	50-350 bar
		standard setting 280 bar

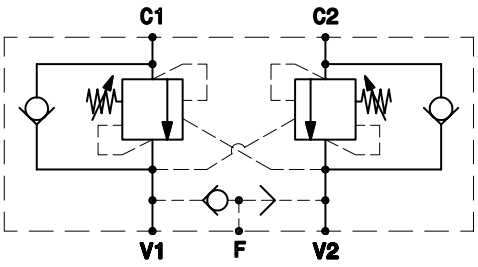
Italgroup distributor fitting

D47

SIZE AND TECHNICAL DATA

OVDA 300 — OVDA SERIES





PORTS DIMENSION	
V1,V2	1"1/4 BSPP
C1,C2	O-Ring 2-224
F	1/4" BSPP

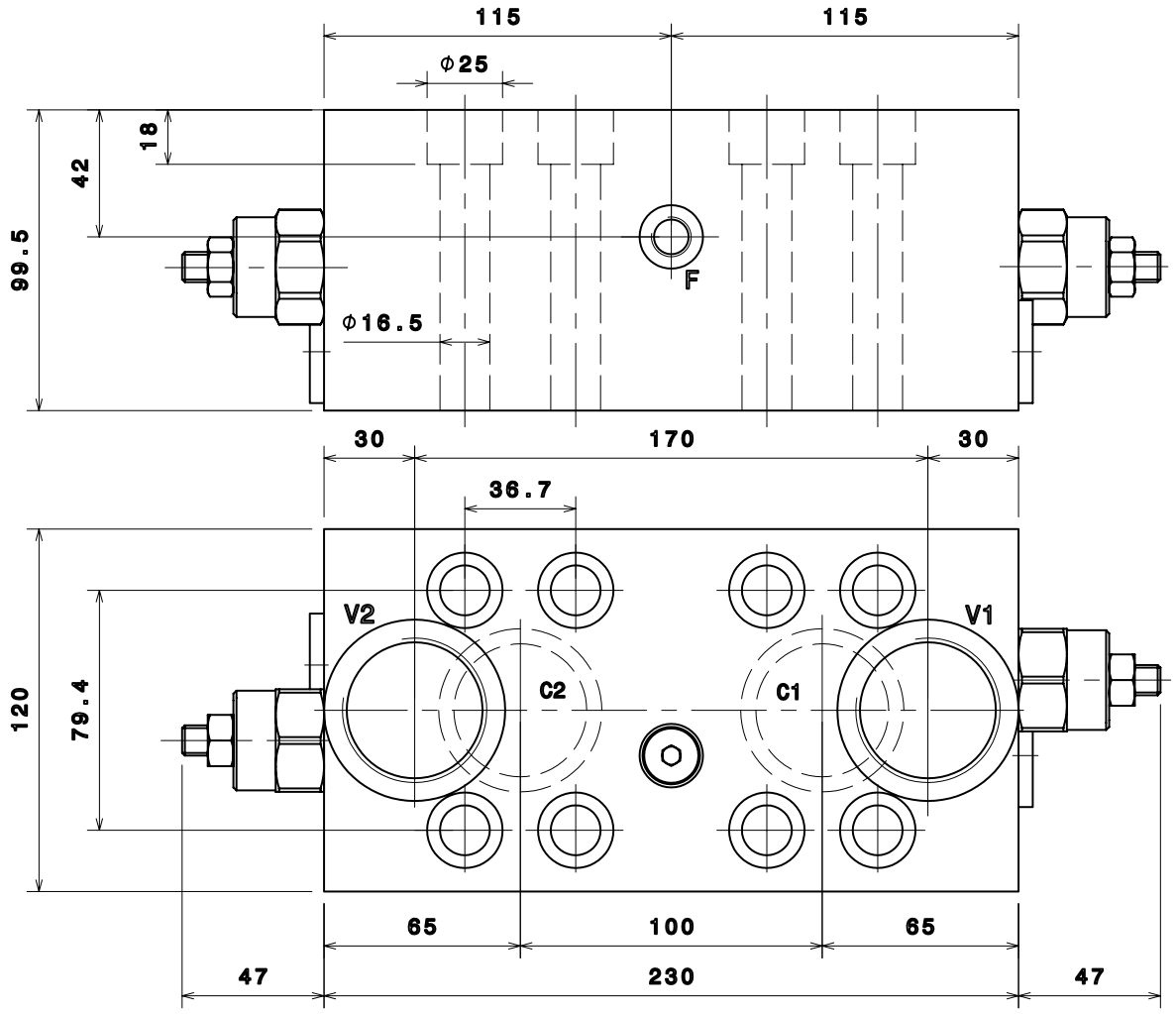
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		300 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
Relief valve setting range	A	20-200 bar
		standard setting 100 bar
	B	50-350 bar
		standard setting 280 bar

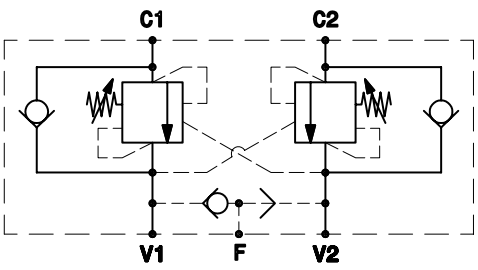
Italgroup distributor fitting

D75

SIZE AND TECHNICAL DATA

OVDA 480 — OVDA SERIES





PORTS DIMENSION	
V1,V2	1"1/2 BSPP
C1,C2	O-Ring 2-225
F	1/4" BSPP

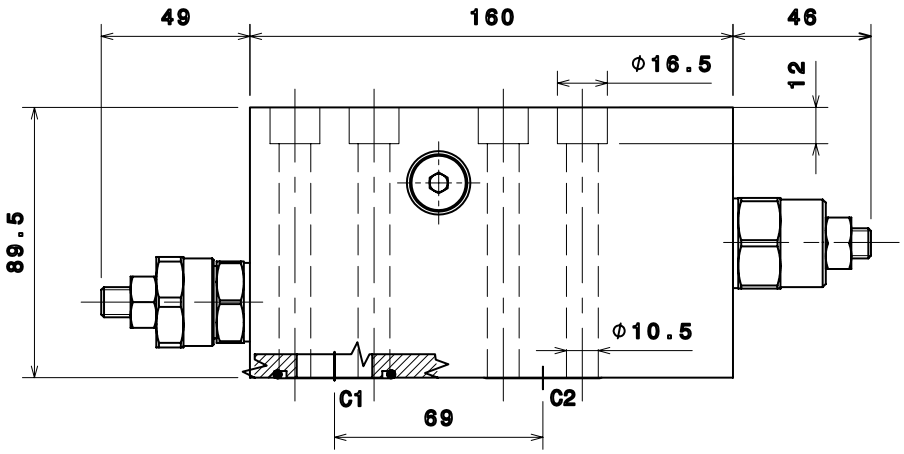
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		480 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
Relief valve setting range	A	20-200 bar
		standard setting 100 bar
	B	50-350 bar
		standard setting 280 bar

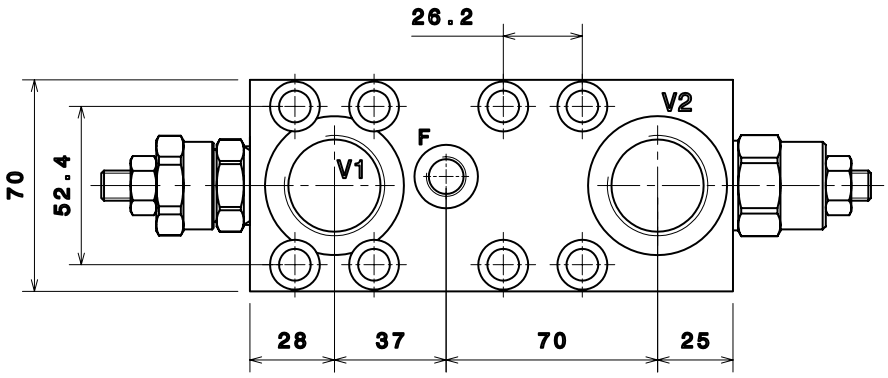
Italgroup distributor fitting

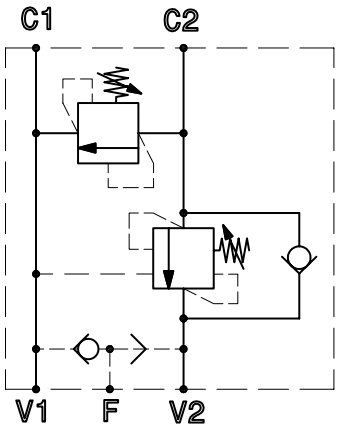
D90

SIZE AND TECHNICAL DATA

ORVSA 160 — ORVSA SERIES







PORTS DIMENSION	
V1,V2	1" BSPP
C1,C2	O–Ring 2–126
F	1/4" BSPP

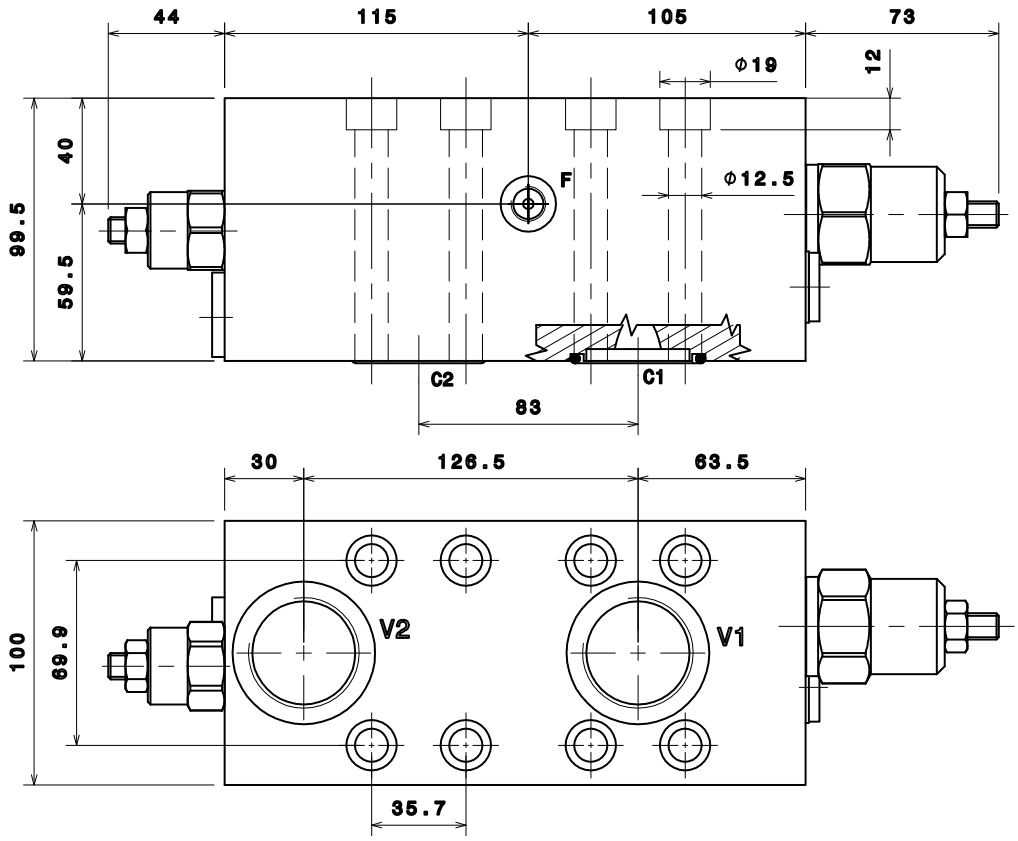
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		150 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
OVC relief valve setting range	A	20–200 bar
		standard setting 100 bar
	B	50–350 bar
		standard setting 280 bar
VLP relief valve setting range	A	20–100 bar
		standard setting 80 bar
	B	40–250 bar
		standard setting 180 bar
	C	60–350 bar
		standard setting 250 bar

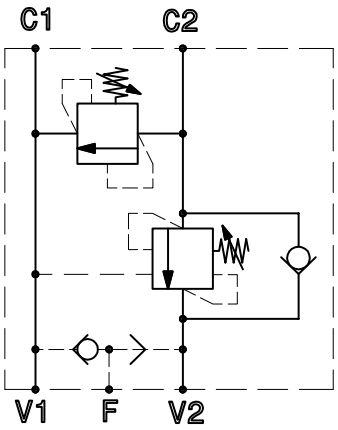
Italgroup distributor fitting

D47

SIZE AND TECHNICAL DATA

ORVSA 300 — ORVSA SERIES





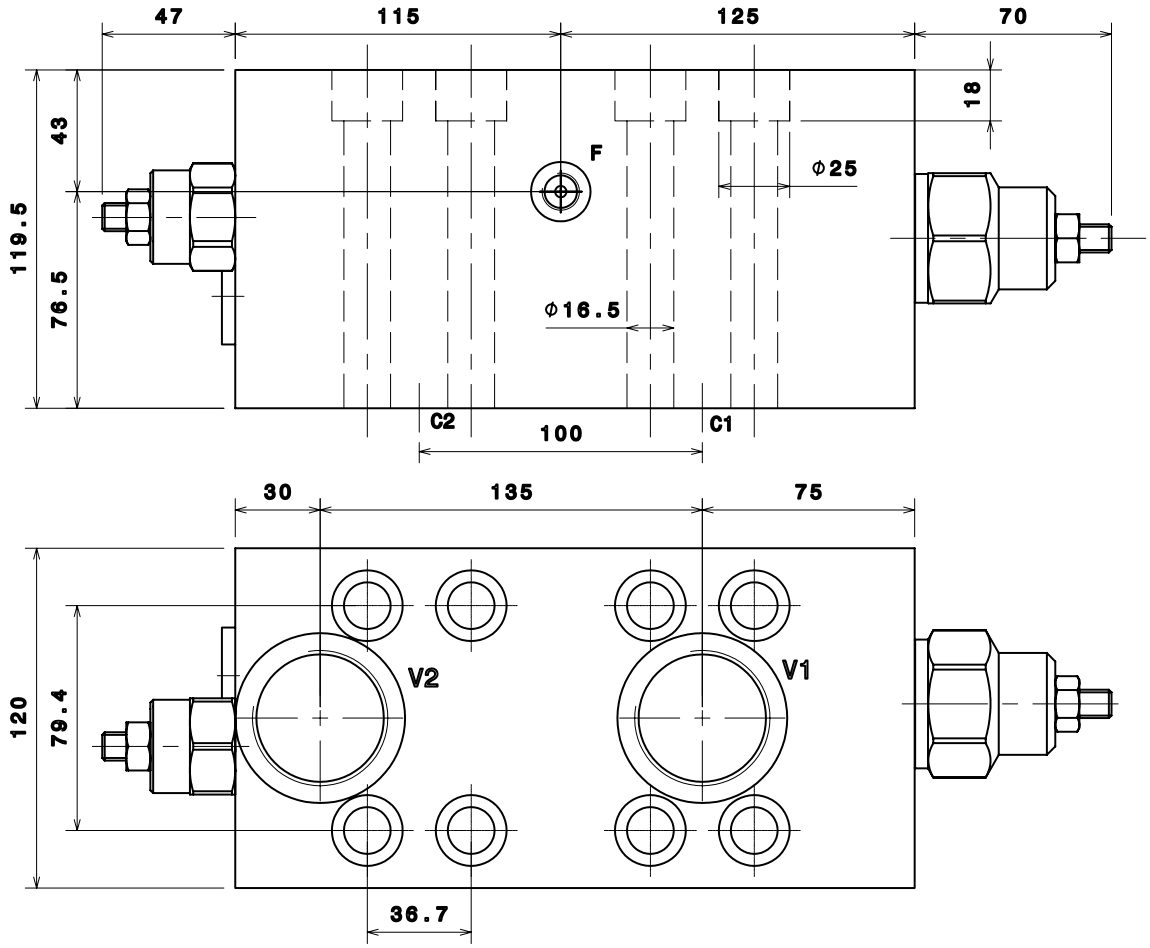
PORTS DIMENSION	
V1,V2	1"1/4 BSPP
C1,C2	O-Ring 2-224
F	1/4" BSPP

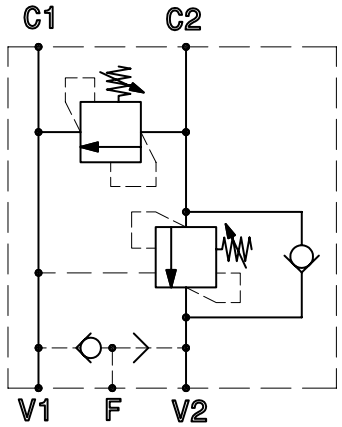
TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		300 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
	4	10:1
OVC relief valve setting range	A	20-200 bar standard setting 100 bar
	B	50-350 bar standard setting 280 bar
VLP relief valve setting range	A	20-100 bar standard setting 80 bar
	B	40-250 bar standard setting 180 bar
	C	60-350 bar standard setting 250 bar

Italgroup distributor fitting
D75

SIZE AND TECHNICAL DATA

ORVSA 480 — *ORVSA SERIES*





TECHNICAL DATA		
Material		Anodized aluminium corrosion resistant
Peak pressure		350 bar
Maximum pressure		300 bar
Maximum flow rate		480 l/min
Pilot ratio	1	3:1
	2	4.25:1
	3	8:1
OVC relief valve setting range	A	20–200 bar
		standard setting 100 bar
	B	50–350 bar
		standard setting 280 bar
VLP relief valve setting range	A	20–100 bar
		standard setting 80 bar
	B	40–250 bar
		standard setting 180 bar
	C	60–350 bar
		standard setting 250 bar

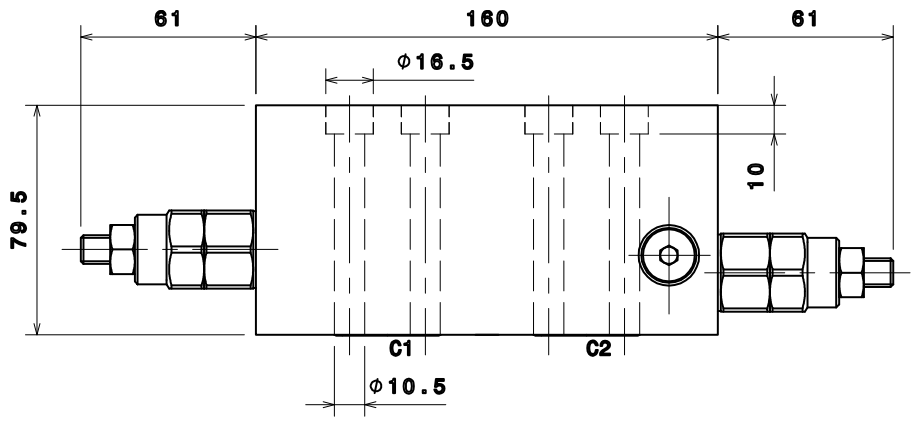
PORTS DIMENSION	
V1,V2	1"1/2 BSPP
C1,C2	O–Ring 2–225
F	1/4" BSPP

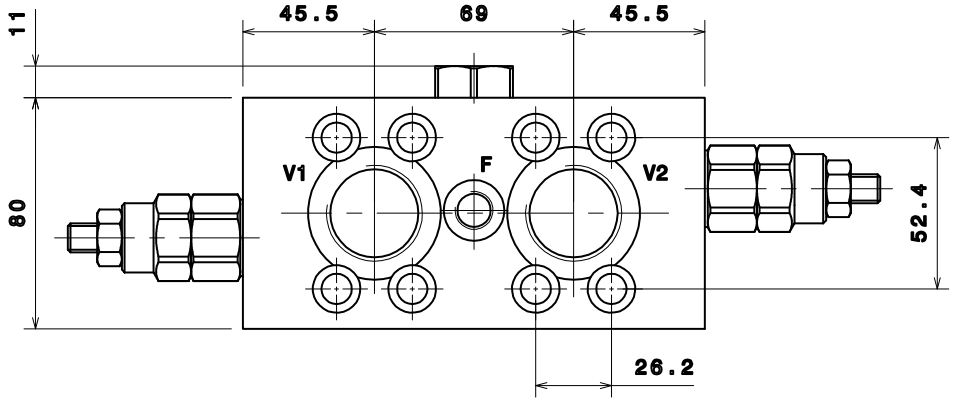
Italgroup distributor fitting

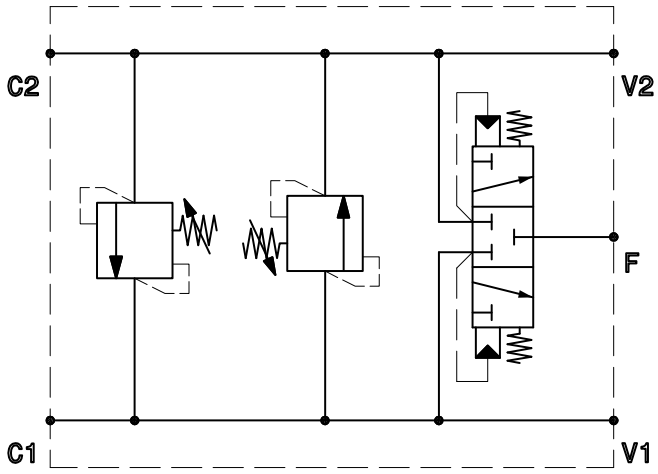
D90

SIZE AND TECHNICAL DATA

RVDAP 80 — RVDAP SERIES







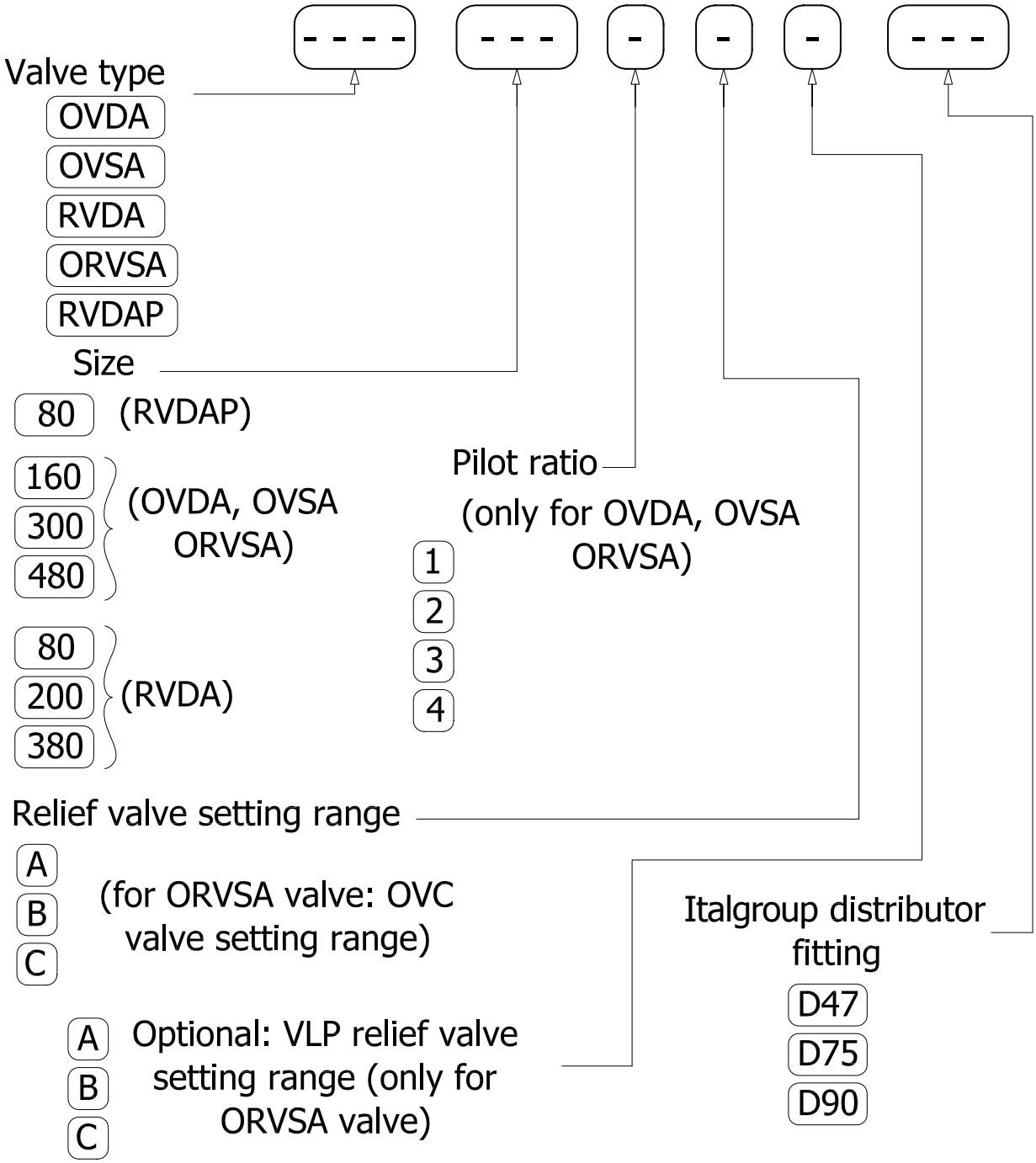
TECHNICAL DATA		
Material	Anodized aluminium corrosion resistant	
Maximum pressure	300 bar	
Maximum flow rate	80 l/min	
Relief valve setting range	A	20–100 bar
		standard setting 80 bar
	B	40–250 bar
		standard setting 180 bar
	C	60–350 bar
		standard setting 250 bar

PORTS DIMENSION	
V1,V2	1" BSPP
C1,C2	O–Ring 2–125
F	1/4" BSPP

Italgroup distributor fitting

D47

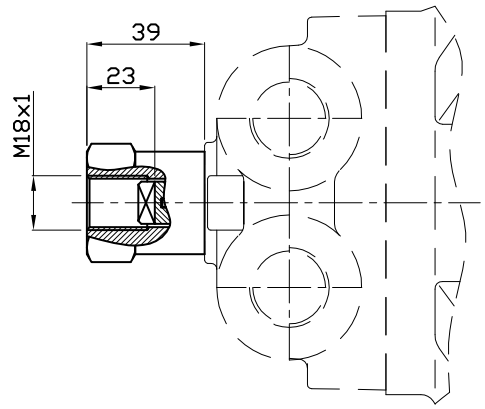
ORDERING INSTRUCTIONS VALVES



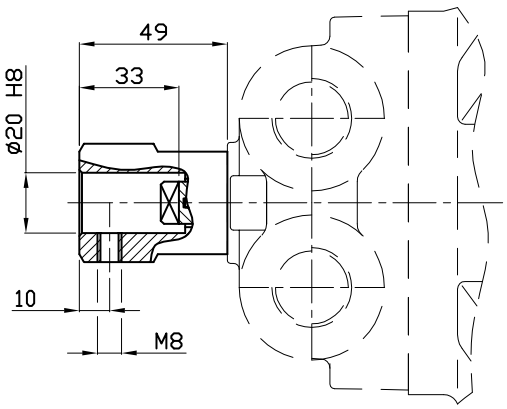
EXAMPLE:
OVDA.300.1.A.D75
RVDA.200.C.D75
OVSA.160.2.B.D47
OVDA.480.1.A.D90
ORVSA.160.3.A.B.D47
RVDAP.80.B.D47

TACHOMETER

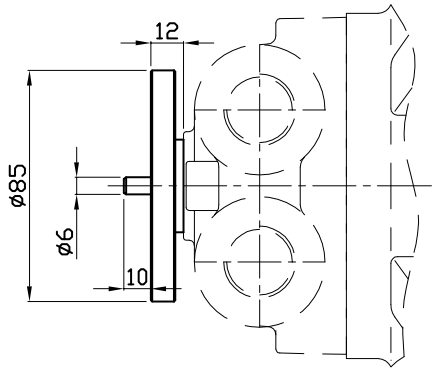
TA

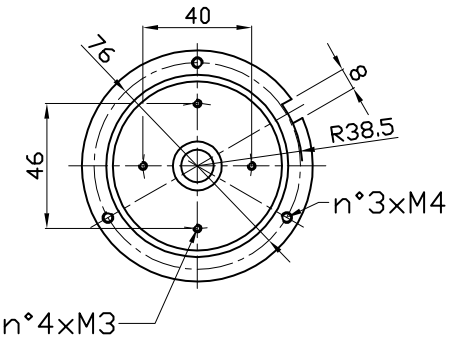


TB

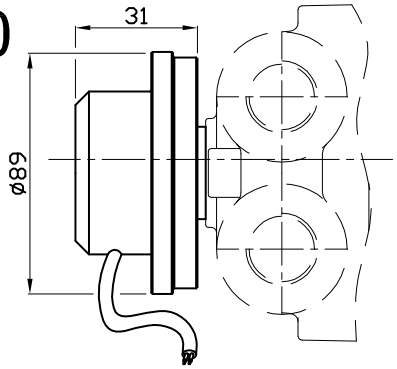


EST





EST.30

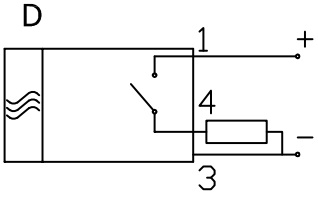


Operating parameters	E-...../3
Power supply (VDC)	10-30
Switching current (mA)	150
Frequency (Hz) 100rpm	50
Impulse/rpm	30
Operating temp. (°C)	-24/+70
Protection degree	IP67
Output	NPN
Motor type	All types

MODEL	Ø5
Torque	1 Nm

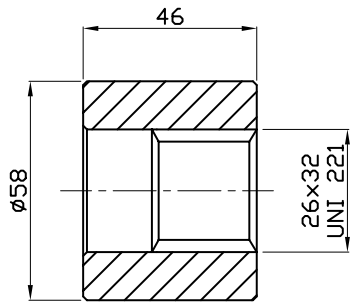
Model	Output	Fig.
E-..../.AP/....	PNP	D

D



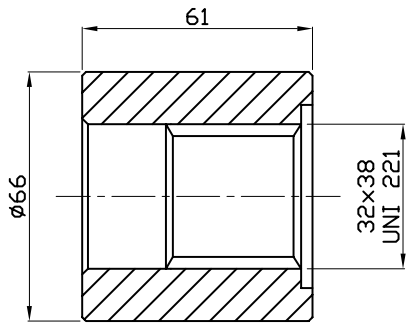
SPLINE BILLET

SB1



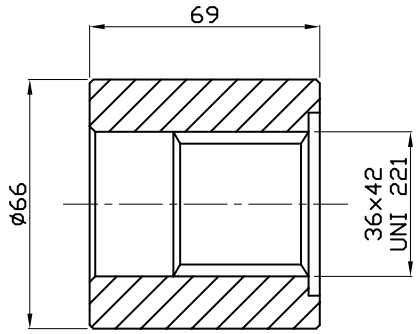
only for:
IAM 80, 100, 150,175,195 H1 A0
IAM 80, 100, 150,175,195 H1 A1

SB2



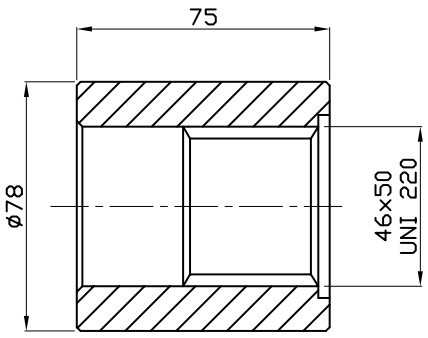
only for:
IAM 200,250,300 H1 A0
IAM 200,250,300,350 H2 A0
IAM 190/C H2 A0

SB3



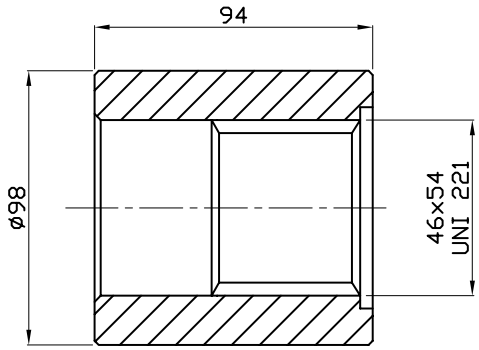
only for:
IAM 400,500,600 H2 A0
IAM 400,450,500,600,650,700 H3 A0

SB4



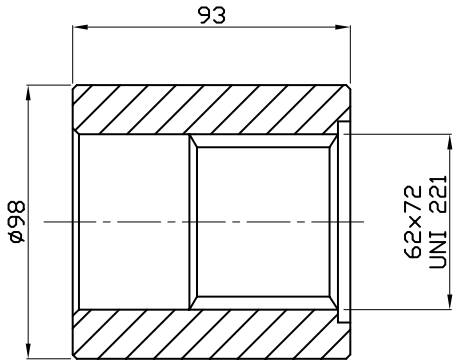
only for:
IAM 800 H3 A0
IAM 800/N H3 A0
IAM H4 A0

SB5



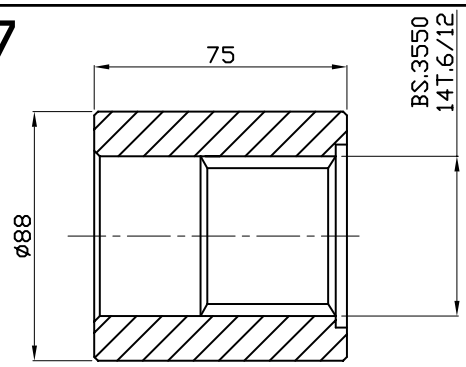
only for:
IAM 450/C H3 A1
IAM H4 A1

SB6



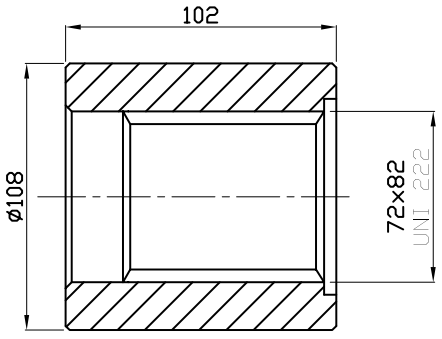
only for:
IAM H5 A0
IAM 1200/C,1400/C,1500/C H5 A0

SB7



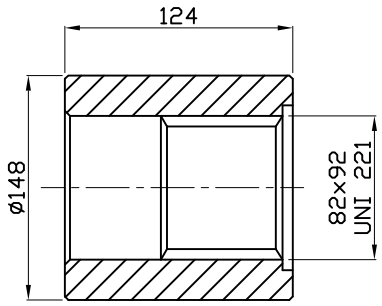
only for:
IAM H5 A1
IAM 1000/B60,1400/B80,1600/B100 H5 A1

SB8



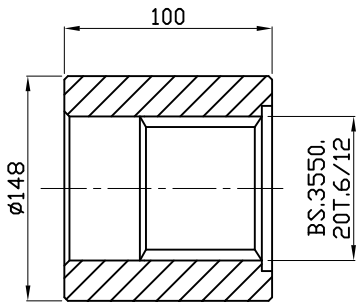
only for:
IAM 1600/C,1800/C,2000/C,2200/C H5 A0

SB9



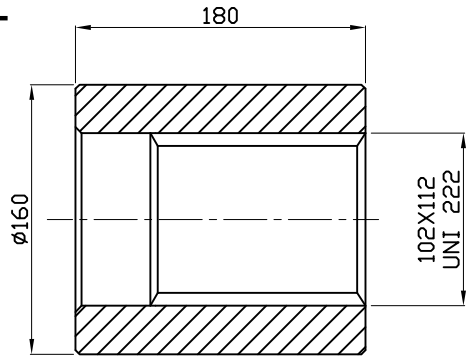
only for:
IAM H6 A0
IAM H6/C A0
IAM 2200/B125,2500/B150,3000/B200 H6 A0

SB10



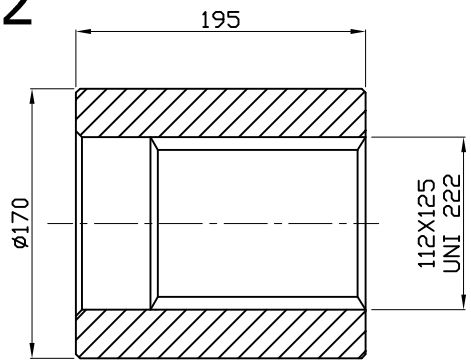
only for:
IAM H6 A1
IAM H6/C A1
IAM 2200/B125,2500/B150,3000/B200 H6 A1
IAM H7 A1
IAM H8 A1

SB11



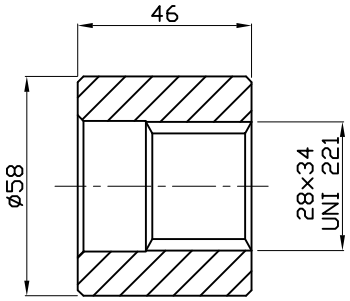
only for:
IAM H7/C A0

SB12



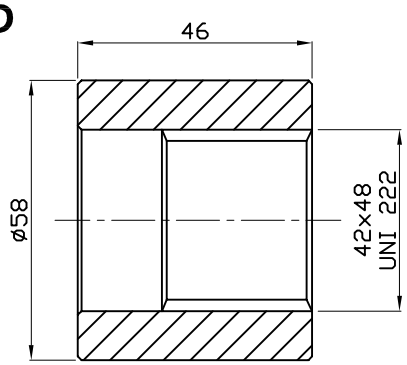
only for:
IAM H8/C A0

SB14



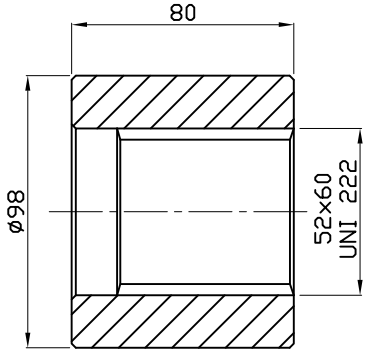
only for:
IAM H1/GM1
IAM H1/BH

SB15



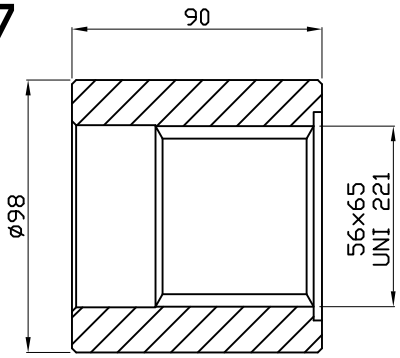
only for:
IAM 300/C H2 A0

SB16



only for:
IAM 700/C,800/C H4 A0

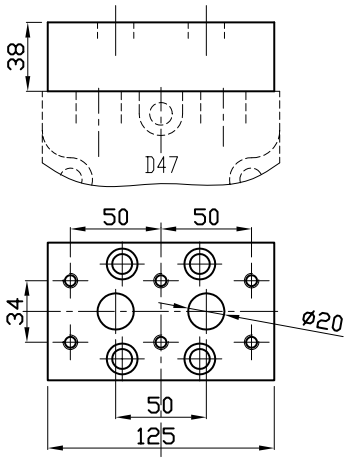
SB17



only for:
IAM H5/GM5 A0
IAM H5/S A0

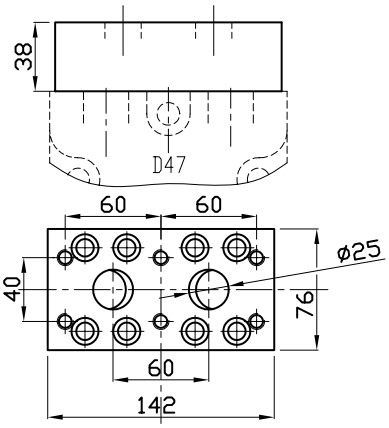
CONVERSION FLANGES

FL1



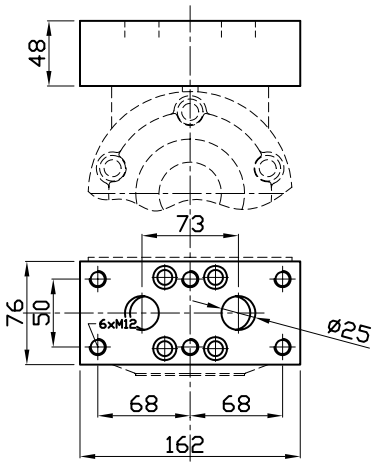
Connection block, fitting D47 distributor, for motor MR 160/190/250/300

FL2



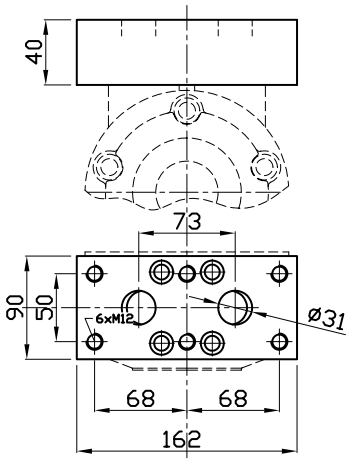
Connection block, fitting D47 distributor, for motor MR 350/450/500/600/700/800

FL3



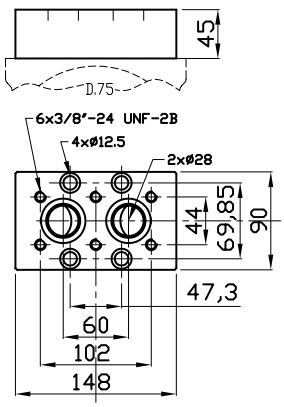
Connection block, fitting D55 distributor, for motor MR 1100/1400/1600/1800/2100

FL4



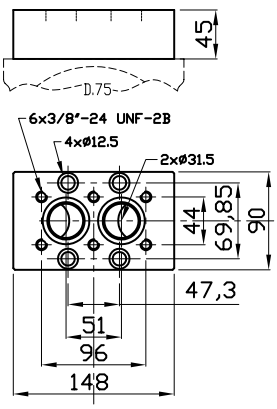
Connection block, fitting D75 distributor, for motor MR 1100/1400/1600/1800/2100

FL5



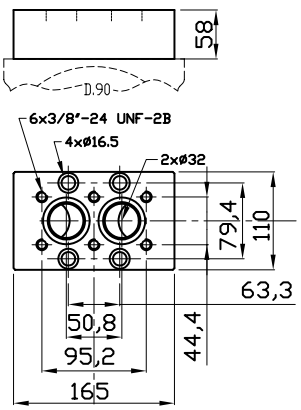
S03 plate for D75

FL6



S04 plate for D75

FL7



S04 plate for D90

CONTACT US

Italgroup S.r.l.
Via Pacinotti 20/22
41010 - Gaggio di Piano (Modena) – Italy

Tel. +39 059 92 42 57
Fax +39 059 92 01 13
e-mail: italgroup@italgroup.eu
internet: http://www.italgroup.eu

REACH US

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HYDRAULIC MOTORS

ITALY

ITALGROUP srl
VIA PACINOTTI, 20/22 - 41013 GAGGIO DI PIANO
CASTELFRANCO EMILIA - MODENA - ITALY
Tel. +39 059 924257 - Fax +39 059 920113
E-mail: italgroup@italgroup.eu
Web Site: www.italgroup.eu