

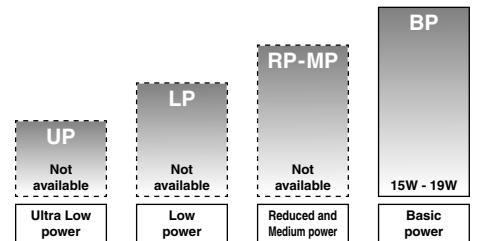
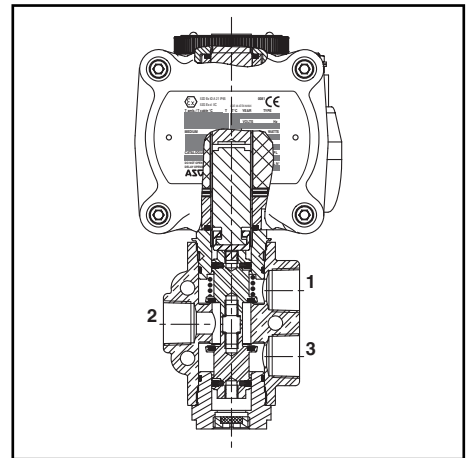
FEATURES

- Solenoid valves with explosionproof operator MB type for use in potentially explosive atmospheres according to ATEX Directive 94/9/EC EC type examination certificate no : LCIE 03 ATEX 6059 X
- Compliance with the Essential Health and Safety Requirements of the ATEX Directive has been assured by compliance with the European Standards EN 60079-0, EN 60079-1, EN 61241-0 and EN 61241-1
- Easy electrical connection with screw terminals
- Versions with or without auxiliary manual operator
- Two types of seals for a wide range of applications, particularly at low temperatures
- The solenoid valves have TÜV certified IEC 61508 Functional Safety data and can be used up to SIL 4/AK 7 (see Options page 2)

GENERAL

Differential pressure 0 to 10 bar [1 bar =100 kPa]
Response time 30 - 50 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas	- 10°C to + 60°C	NBR (nitrile)
	- 40°C to + 60°C ⁽²⁾	VMQ (silicone)



POWER LEVELS - cold electrical holding values (watt)

SPECIFICATIONS

pipe size	orifice size		flow coefficient Kv				operating pressure differential (bar)			power coil (W)		catalogue number			
	1→2	2→3	1→2		2→3		min.	max. (PS)				without manual operator	with screw type manual operator	with push type manual operator	
	(mm)	(mm)	(m³/h)	(l/min)	(m³/h)	(l/min)		~	=	~	=				
NPT	(mm)	(mm)	(m³/h)	(l/min)	(m³/h)	(l/min)									
U - Universal, brass body, NBR seals															
1/2	10	10	1,6	27	1,5	25	0	10	10	19	-	12600001	12600005	12600053	
										-	15	12600002	12600006	12600054	
U - Universal, brass body, VMQ seals ⁽²⁾															
1/2	10	10	1,6	27	1,5	25	0	10	10	19	-	12600013	12600017	12600057	
										-	15	12600014	12600018	12600058	
U - Universal, stainless steel body, NBR seals															
1/2	10	10	1,6	27	1,5	25	0	10	10	19	-	12600007	12600011	12600055	
										-	15	12600008	12600012	12600056	
U - Universal, stainless steel body, VMQ seals ⁽²⁾															
1/2	10	10	1,6	27	1,5	25	0	10	10	19	-	12600019	12600023	12600059	
										-	15	12600020	12600024	12600060	

⁽²⁾ Low temperature version: allowable temperature: fluid -40°C to +60°C; minimum ambient: -40°C. Contact us for -50°C.

ELECTRICAL CHARACTERISTICS

Coil insulation class H
Coil connection Screw terminals
Electrical safety IEC 335
Electrical enclosure protection Moulded IP65 (EN 60529)
Standard voltages DC (=) : 24V - 48V
 (Other voltages and 60 Hz on request) AC (~) : 24V - 48V - 115V - 230V / 50 Hz

SAFETY CODE

 II 2 G Ex d IIC T6-T5
 II 2 D Ex tD A21 IP65 T85°C-T100°C

operator type	power ratings				operator ambient temperature range (TS) (C°)	safety code	replacement coil /kit		type ⁽¹⁾
	inrush ~ (VA)	holding ~ (VA)	hot/cold = (W)	hot/cold = (W)			~ 230 V/50 Hz	= 24 V DC	
	MB	35	15	19			12 / 15	-40 to +60	

⁽¹⁾ Refer to the dimensional drawings on the following page.

TEMPERATURE CLASSIFICATION

operator AC (~)

Pn (W)	max. ambient temp. °C surface temperature		
	T6 85°C	T5 100°C	-
19	50	60	-

operator DC (=)

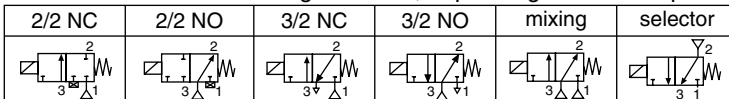
Pn (W)	max. ambient temp. °C surface temperature		
	T6 85°C	T5 100°C	-
15	50	60	-

OPTIONS


- ATEX cable gland certified to ATEX, 3/4 NPT, pre-installed on solenoid valve, supplied with cable clamp (see "Explosionproof Solenoids" section)
 - for non-armoured cable of 8,5 to 16 mm dia., catalogue number **660510**
 - for armoured cable of ID 8,5 to 16 mm / OD 12 to 21 mm, catalogue number **660514**
- SIL certification (version with or without push type manual operator, including NPT 1/2 stainless steel exhaust protector), catalogue number **610544**
- Other cable diameters
- Exhaust protector:
 - bronze for brass body, catalogue number **560595**
 - stainless steel for stainless steel body, catalogue number **560594**
- Marine paint/anti-corrosive or dust environments

INSTALLATION

- Always install solenoid valves with **body vertical and solenoid upward**
- Can be used for the following functions, depending on how the ports are connected:

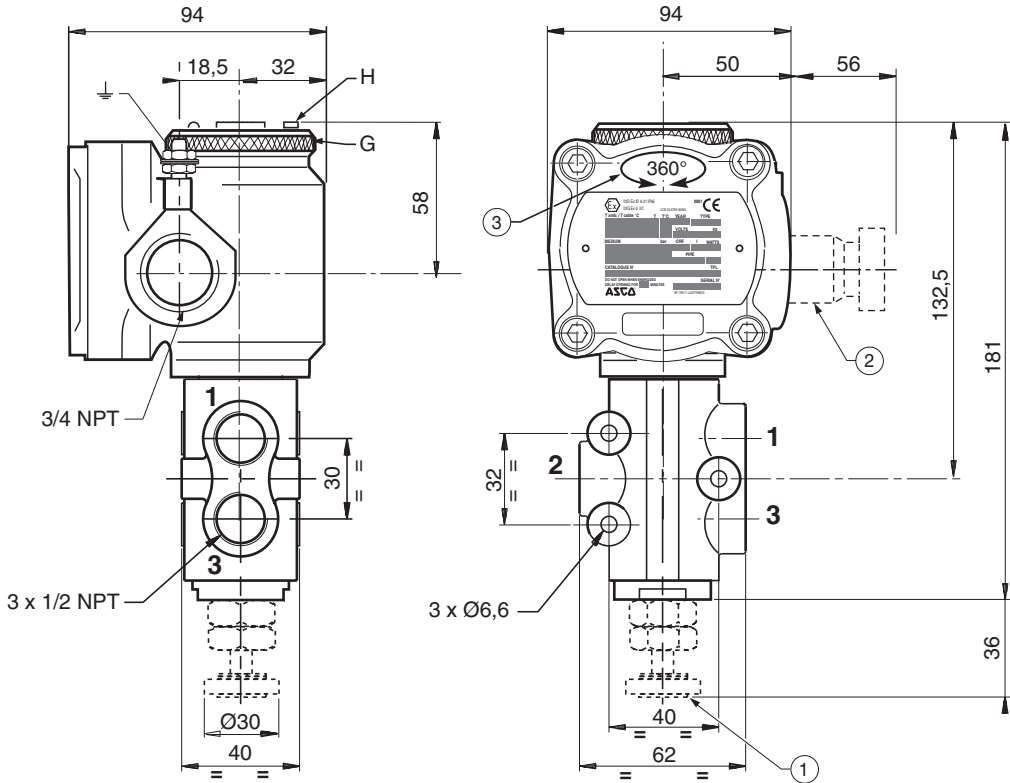


- Solenoid valves have 3 mounting holes in body
- IEC 61508 Functional Safety, allowable temperature range: -40°C to +60°C. Probability of failure on demand, contact us
- Threaded pipe connection is standard NPT (ANSI 1.20.3)
- Valves (catalogue number 610 544) are provided with a specific exhaust protector
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg) 



TYPE 01:
Prefix MB: II 2 G Ex d IIC - II 2D Ex tD A21 IP65, T 85°C - T 100°C
 Basic power
 Aluminium
 EN 60079-0, EN 60079-1, EN 61241-1 & EN 13463-1

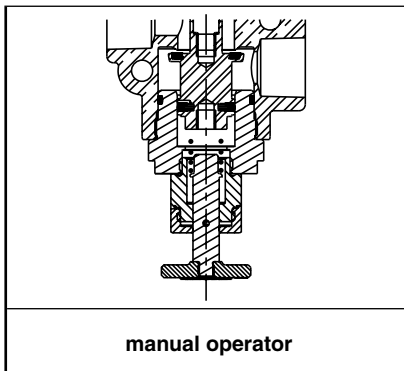


type	operator type	body	weight ⁽¹⁾
MB	01	brass	2,1
		stainless steel	1,7

⁽¹⁾ Without manual operator, including enclosure and coil.
 Manual operator version, add 0,1 kg

- ① Manual operator location.
- ② Explosionproof cable gland with clamp according to ATEX.
- ③ To change the orientation of the solenoid operator relative to the ports, the screw (H) and the nut on the cover (G) must be loosened.

SECTIONAL DRAWING



ACCESSORIES

