Offshore and Onshore Solenoid valves

Parker

ENGINEERING YOUR SUCCESS.

PARKER FCSE

The FCSE 8120 UK Catalogue is a selection of Parker FCSE products dedicated to Oil & Gas Market. General catalogue FCSE is also available and contains a comprehensive list of Parker Fluid Control Products for other markets and general purpose applications.

WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Who we are?

The Fluid Control Solution Europe (FCSE) is a Business Unit of Parker Hannifin, the global leader in motion and control technologies.

Our core competence is the development and manufacturing of an extremely diverse range of fluid control products, including solenoid valves and pressure regulators.

Fluid Control Solutions Europe is integrating in its offering the Lucifer® and Skinner® brands, following the acquisition by Parker in the 90s.
A wide selection of Lucifer® and Skinner® branded products is included in this literature.

Where we are?

Our European headquarters are located in Gessate (Milan-Italy) , this is also where our R&D, Marketing, Application Support and Product Management functions are located.
Our Products are mainly manufactured in Gessate (Milan-Italy). The Parker Sales Companies and comprehensive distribution network support you, wherever you are.

History

Parker FCSE has been a leading player in the manufacturing and development of solenoid valve technologies for over 60 years, with continuous research and development bringing innovative solutions to the marketplace, for example leading the way in the utilisation of synthetic ruby for critical water applications or the unsurpassed reliability and precision of our pressure regulators. The expertise accumulated and developed through the years is evident in the superior quality of our solutions.

Markets

Our products are typically designed for markets including Industrial Equipment, Industrial Automation,Mobile, Transportation, Life Sciences, Food & Beverage and for Fluid and Process Control.

Benefits

The modular concept of our products, having separate solenoid valves and electrical parts, provides the customer with increased flexibility by allowing numerous combinations. This additional flexibility can enable distributors to greater reduce valve inventory levels, whilst retaining the same number of capabilities. Parker also has unrivalled experience in developing customised product solutions complying with the highest technical, environmental, energy and service life requirements.

PARKER FCSE - MILAN - ITALY

Heavy Duty, Corrosion Resistant for Hazardous Areas

Extremely severe operating conditions prevailing in the offshore applications,safety and hazardous area requirements imply design features not generally found in conventional solenoid valves.

The 316 stainless steel range of solenoid valves described in this brochure are the result of many years cooperation between offshore operators and Parker, a worldwide leader in design and development of high technology solenoid valves.

Parker products follow a severe Quality Assurance and materials traceability program. They are supplied with corresponding certificates.

Used or specified as actuator control or fail-safe valves.
We offer many different protection solutions ("ia","d","e" & "mb"), according to ATEX and IECEx certification.

We provide the ultimate in quality, reliability and safety: AK7 certified (valves X), working in SIL 2 & 3 loops (valves F, V & X).

Technical Data

Common features:

Poppet design.

Safe body working pressure:
10500 kPa /105 bar for F,
V and X valves types
(except U033X5195 valve:
SBWP = 15 bar)

Valve mounting:

- direct pipe mounting: valves V and X
- Sub-base mounting (or flanged): valves F + 3 valves X references

Mouting position:

Indifferent

Body material:

316L Stainless steel

Valve trim (gasket) material:

Buna (NBR), Viton (FKM), Polyurethan (PUR), Silicon (VMQ)

Seat discs material:

Stainless steel (valves F & V), polyamid-imid (valves X)

Medium:

Instrument or industrial air, dry or lubricated, nitrogen (121V… valve)

Filtration:

50µm or better

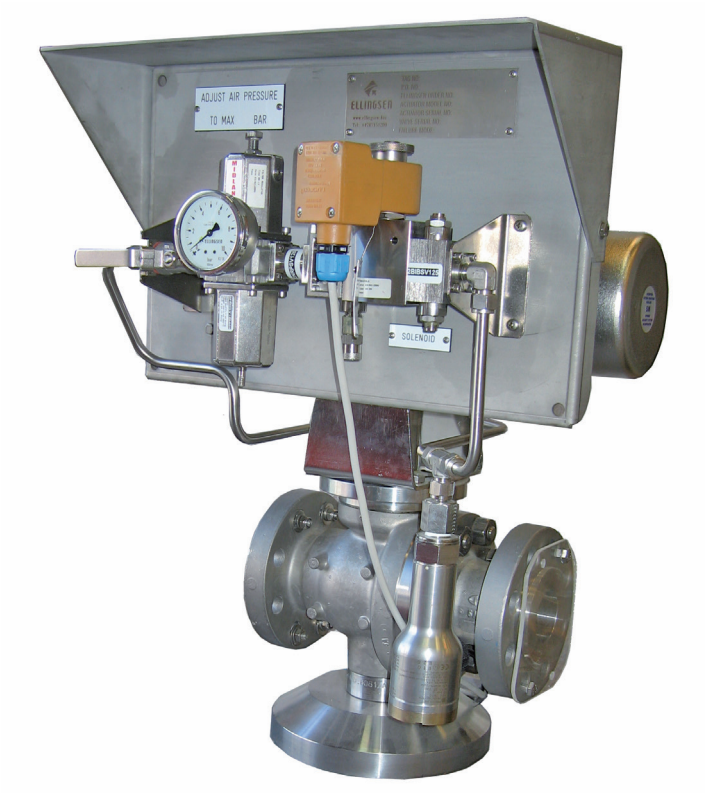
SIL grade:
All the parts included in this catalogue are SIL Certified through an external notified body.

Applications

- Pneumatic Actuator control.
- Fail-safe function of main ON/OFF or modulating valves. The main valve keeps its safe position in case of current failure. Fail-safe valves are either electrically (U)133X, or manually (U)033X resettable.

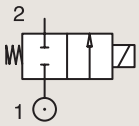
Benefits

- Extensive range of ATEX and IECEx certified coils fully complying to stated EN and IEC standards.
- A completely traceable manufacturing programme together with 40 years field proven technology in the Offshore Industry.
- Complete range of corrosion resistant valves together with cutting edge low temperature valves technology.
- Corrosion resistance (Stainless steel 316 L material)



V SERIES
STAINLESS STEEL VALVES FOR PIPE MOUNTING

316L STAINLESS ST.
PIPE MOUNTING
NORMALLY CLOSED

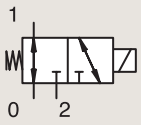


Port size	Orifice Ø	Flow factor			Operating Pressure Differential			Fluid Temp.		Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
					Min	Max(MOPD)		Min	Max										
	mm	Kv l/min	KV m³/h	Qn l/min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
1/4" NPT	1	0.6	0.04	40	0	-	98	-40	65	PUR	**U121V7595** [1]	-	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2/10.3	8165
	1	0.6	0.04	40	0	98	98	-40	65	PUR	**U121V7595** [1]	-	**496700**	1-21	Ex db mb IIC T4	8	8	9.0/10.1/10.2/10.3	8165
	1	0.6	0.04	40	0	98	98	-40	65	PUR	**U121V7595** [1]	-	**497105**	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.2/10.3	8299
	1	0.6	0.04	40	0	98	98	-40	50	PUR	**U121V7595** [1]	-	**496895**	-	-	8	8	9.0/10.1/10.2/10.3	8300

Notes:
1. If media is water, max admissible fluid temperature is 40°C

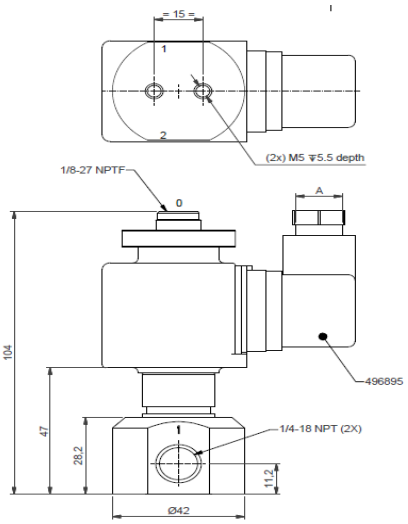
Valves integrable in complete
SIL 3 safety loops (IEC 61508).

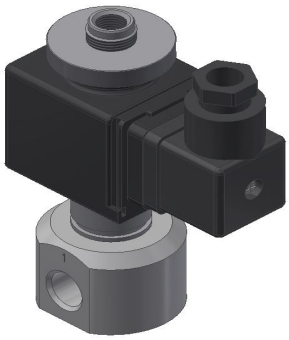
316L STAINLESS ST.
PIPE MOUNTING
UNIVERSAL



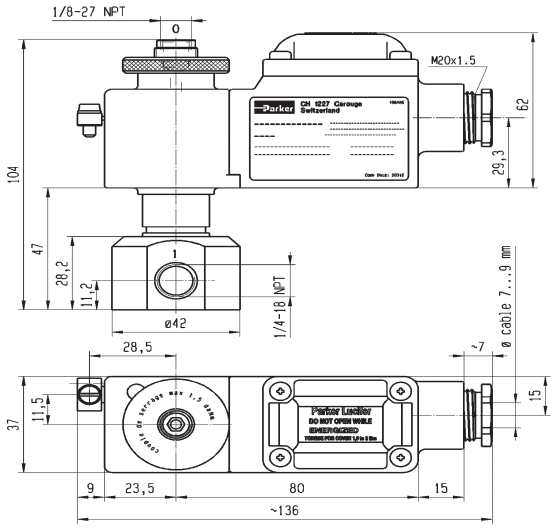
Port size	Orifice Ø	Flow factor			Operating Pressure Differential			Fluid Temp.		Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
					Min	Max(MOPD)		Min	Max										
	mm	Kv l/min	KV m³/h	Qn l/min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
1/4" NPT	2	2.5	0.15	140	0	-	12	-25	65	FKM	**U133V7595**	-	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.3	8166
	2	2.5	0.15	140	0	12	12	-25	65	FKM	**U133V7595**	-	**496700**	1-21	Ex db mb IIC T4	8	8	9.0/10.1/10.3	8166
	2	2.5	0.15	140	0	12	12	-25	65	FKM	**U133V7595**	-	**497105**	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.3	8299
	2	2.5	0.15	140	0	12	12	-25	50	FKM	**U133V7595**	-	**496895**	-	-	8	8	9.0/10.1/10.3	8300
	2.5	3.5	0.21	220	0	-	8.5	-25	65	FKM	**U133V7695**	-	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.3	8166
	2.5	3.5	0.21	220	0	8.5	8.5	-25	65	FKM	**U133V7695**	-	**496700**	1-21	Ex db mb IIC T4	8	8	9.0/10.1/10.3	8166
	2.5	3.5	0.21	220	0	8.5	8.5	-25	65	FKM	**U133V7695**	-	**497105**	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.3	8299
	2.5	3.5	0.21	220	0	8.5	8.5	-25	50	FKM	**U133V7695**	-	**496895**	-	-	8	8	9.0/10.1/10.3	8300

Valves integrable in complete
SIL 3 safety loops (IEC 61508).

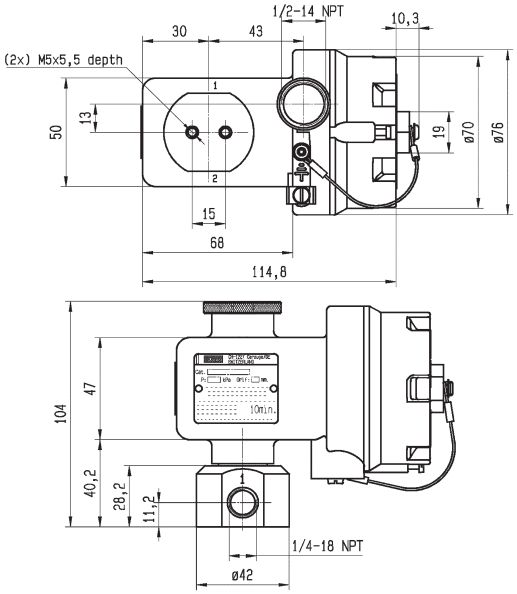




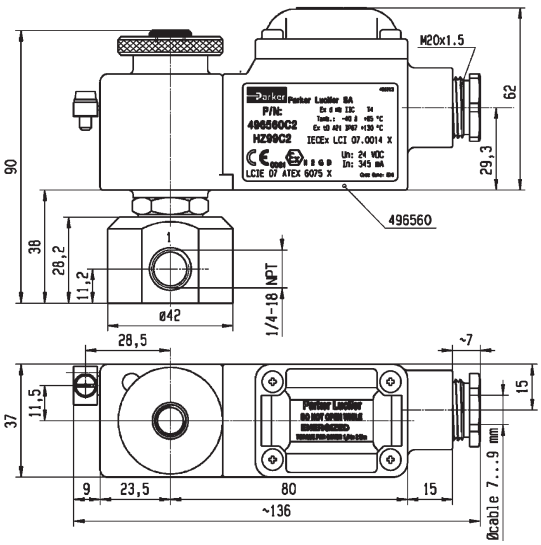
Drawing 8300



Drawing 8166



Drawing 8299



Drawing 8165

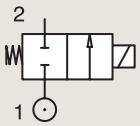
F SERIES

BRASS, STAINLESS STEEL AND VALVES FOR FLANGE MOUNTING

316L STAINLESS ST.

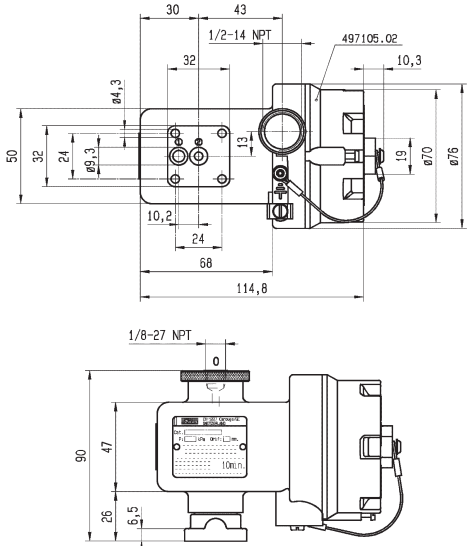
PIPE MOUNTING

NORMALLY CLOSED

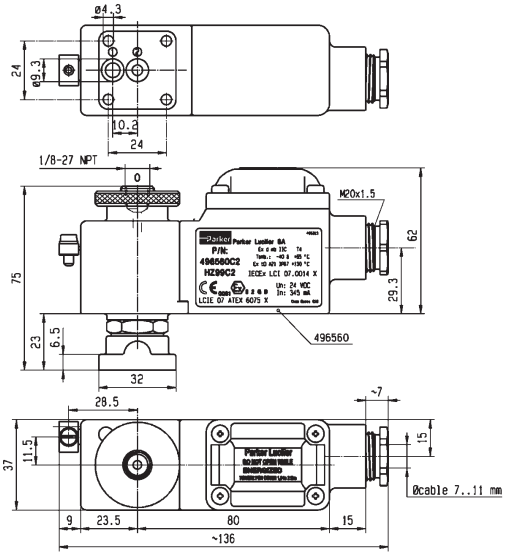


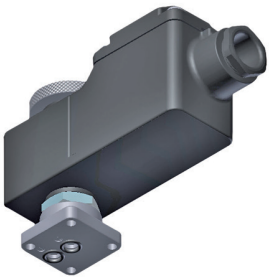
Port size	Orifice Ø	Flow factor			Operating Pressure Differential Min	Operating Pressure Differential Max(MOPD)		Fluid Temp. Min	Fluid Temp. Max	Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
	mm	Kv l/min	KV m³/h	Qn l/min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
SB	2.5	3.5	0.21	220	0	-	12	-25	50	FKM	**U131F7695**	**-**	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2/10.3	8174
	2.5	3.5	0.21	220	0	12	12	-25	75	FKM	**U131F7695**	**-**	**497105**	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.2/10.3	8302
	2.5	3.5	0.21	220	0	12	12	-25	65	FKM	**U131F7695**	**-**	**496700**	1-21	Ex db mb IIC T4	8	8	9.0/10.1/10.2/10.3	8174
	2.5	3.5	0.21	220	0	12	12	-25	50	FKM	**U131F7695**	**-**	**496895**	-	-	8	8	9.0/10.1/10.2/10.3	8309

Valves integrable in complete
SIL 3 safety loops (IEC 61508).

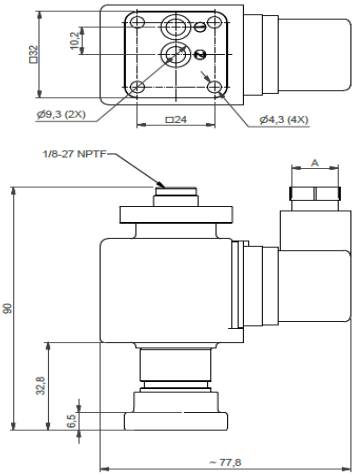


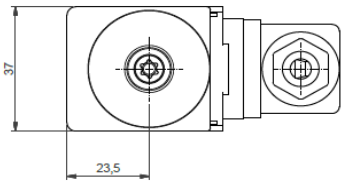
Drawing 8302

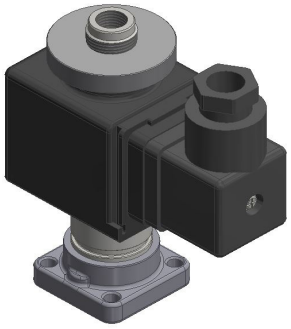




Drawing 8174





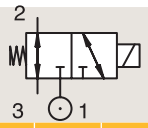


Drawing 8309

X SERIES

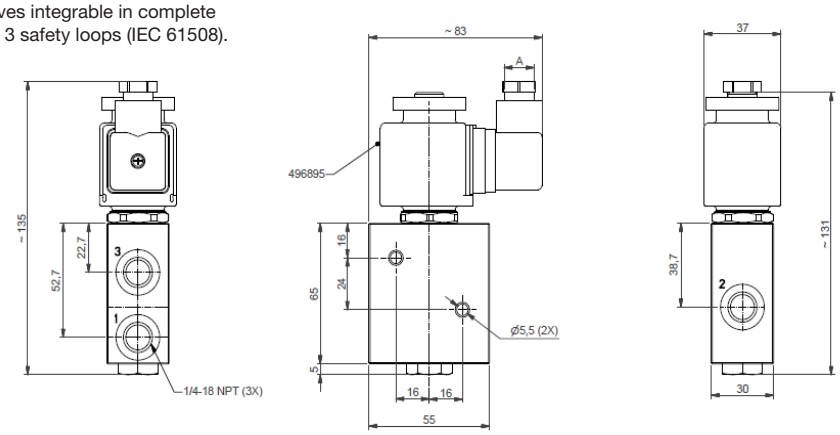
BRASS, ALUMINIUM, STAINLESS STEEL VALVES FOR PIPE MOUNTING

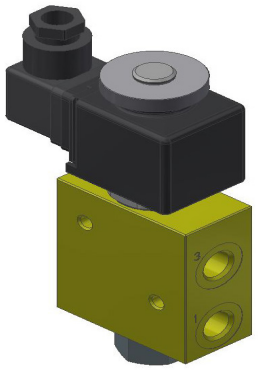
BRASS
PIPE MOUNTING
UNIVERSAL



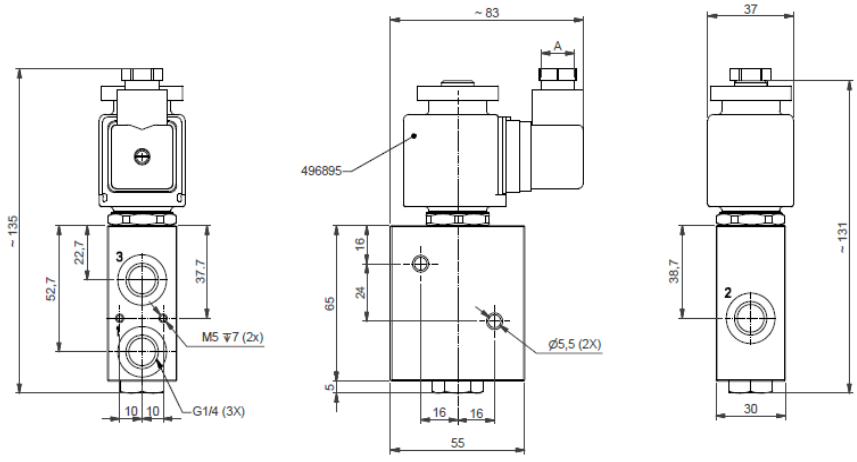
Port size	Orifice Ø	Flow factor	Operating Pressure Differential Min	Operating Pressure Differential Max(MOPD)		Fluid Temp. Min	Fluid Temp. Max	Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
	mm	Qn l'min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
1/4" NPT	6	680	0	-	12	-25	65	NBR	**U133X0111**	-	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2	8280
	6	680	0	12	12	-25	65	NBR	**U133X0111**	-	**492310**	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2	7422
	6	680	0	12	12	-25	65	NBR	**U133X0111**	-	**496555**	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8280
	6	680	0	12	12	-25	65	NBR	**U133X0111**	-	**496700**	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8280
	6	680	0	-	12	-25	65	NBR	**U133X0111**	-	**492210**	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2	7422
	6	680	0	12	12	-25	50	NBR	**U133X0111**	-	**496895**	-	-	8	8	9.0/10.1/10.2	8303
1/4" BSP	6	680	0	-	12	-25	65	NBR	**133X01**	-	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2	8280
	6	680	0	12	12	-25	75	NBR	**133X01**	-	**492310**	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2	6960
	6	680	0	12	12	-25	65	NBR	**133X01**	-	**496555**	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8280
	6	680	0	12	12	-25	65	NBR	**133X01**	-	**496700**	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8280
	6	680	0	-	12	-25	65	NBR	**133X01**	-	**492210**	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2	6960
	6	680	0	12	12	-25	50	NBR	**133X01**	-	**496895**	-	-	8	8	9.0/10.1/10.2	8304

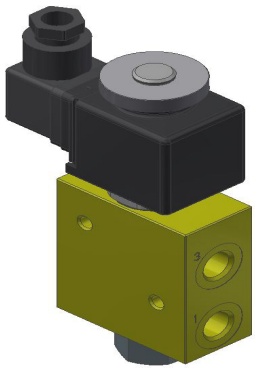
Valves integrable in complete SIL 3 safety loops (IEC 61508).



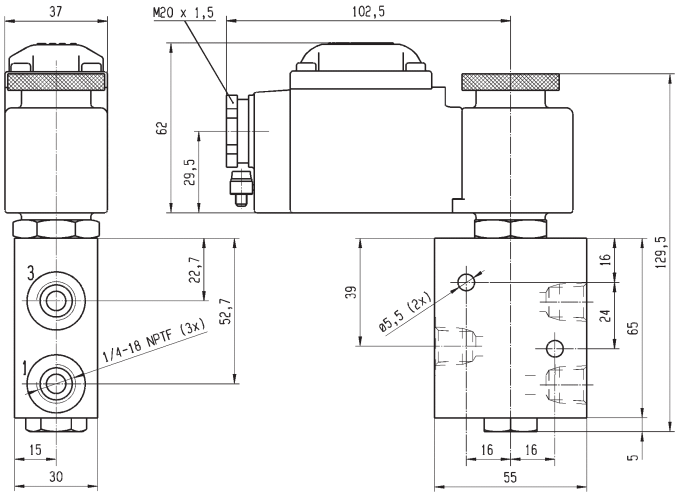


Drawing 8303

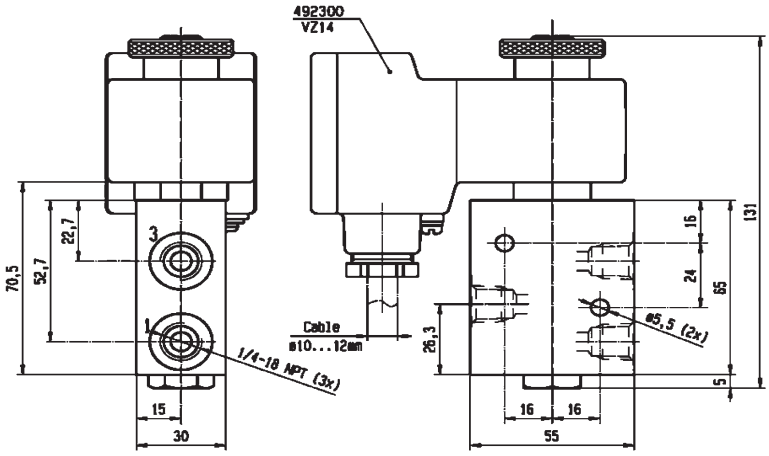


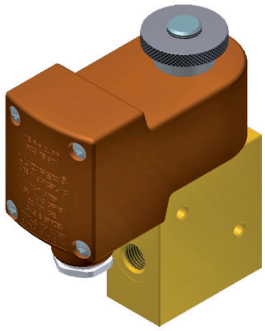


Drawing 8304

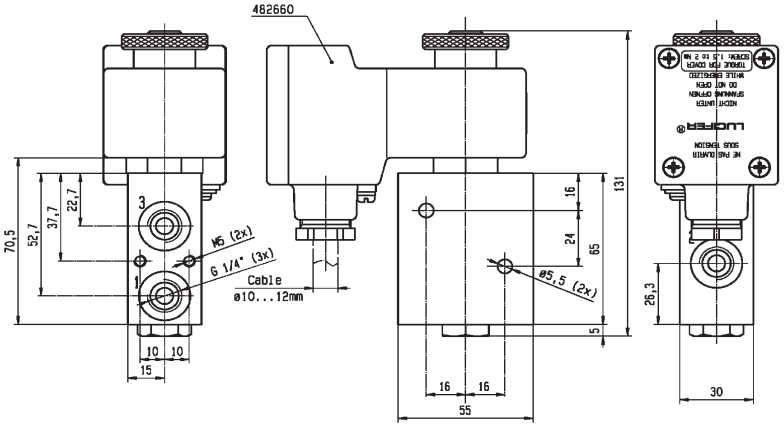


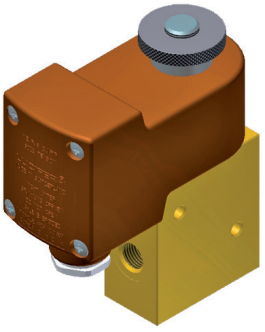
Drawing 8280





Drawing 7442





Drawing 6960

3 WAY VALVES DIRECT OPERATED

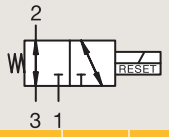
X SERIES

BRASS,STAINLESS STEEL VALVES FOR PIPE MOUNTING

BRASS

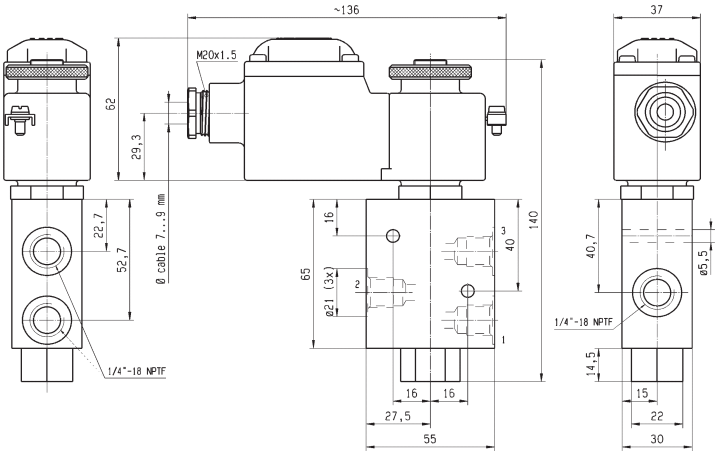
PIPE MOUNTING

UNIVERSAL- MANUAL RESET

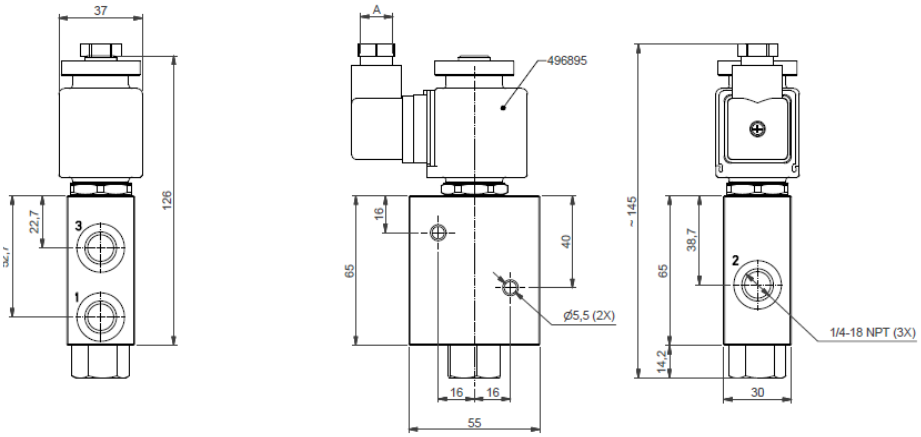


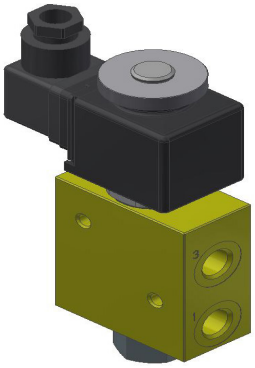
Port size	Orifice Ø	Flow factor	Operating Pressure Differential Min	Operating Pressure Differential Max(MOPD)		Fluid Temp. Min	Fluid Temp. Max	Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
	mm	Qn l'min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
1/4" NPT	6	680	0	-	12	-25	65	NBR	**U033X0111**	**-**	**496565**	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2/12.0	8347
	6	680	0	12	12	-25	65	NBR	**U033X0111**	**-**	**492310**	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2/12.0	7641
	6	680	0	12	12	-25	65	NBR	**U033X0111**	**-**	**496700**	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/12.0	8347
	6	680	0	-	12	-25	65	NBR	**U033X0111**	**-**	**492210**	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2/12.0	7641
	6	680	0	12	12	-25	65	NBR	**U033X0111**	**-**	**496555**	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/12.0	8347
	6	680	0	12	12	-25	65	NBR	**U033X0111**	**-**	**496895**	-	-	8	8	9.0/10.1/10.2/12.0	8305

Valves integrable in complete
SIL 3 safety loops (IEC 61508).

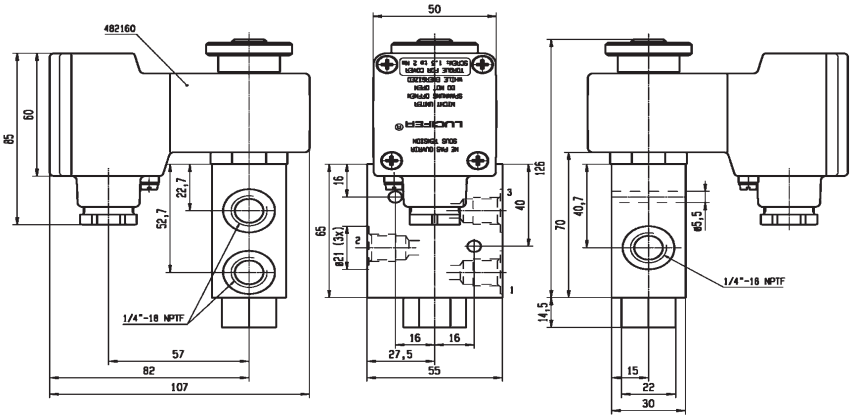


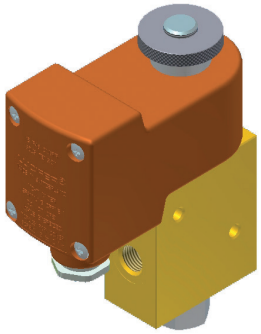
Drawing 8347





Drawing 8305





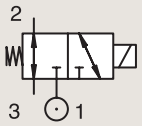
Drawing 7641

3 WAY VALVES DIRECT OPERATED

X SERIES

BRASS, ALUMINIUM, STAINLESS STEEL VALVES FOR PIPE MOUNTING

316L STAINLESS ST.
PIPE MOUNTING

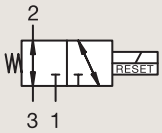


UNIVERSAL

Port size	Orifice Ø	Flow factor	Operating Pressure Differential Min	Operating Pressure Differential Max(MOPD)		Fluid Temp. Min	Fluid Temp. Max	Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
	mm	Qn l'/min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
	6	680	0	-	12	-25	65	NBR	U133X5156 $_{12}$	-	496565	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2	8168
	6	680	0	-	12	-25	65	NBR	U133X5156 $_{12}$	-	492210	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2	7770
	6	680	0	12	12	-25	65	NBR	U133X5156 $_{12}$	-	492310	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2	7770
	6	680	0	12	12	-25	65	NBR	U133X5156 $_{12}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8168
	6	680	0	12	12	-25	65	NBR	U133X5156 $_{12}$	-	496555	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8168
	6	680	0	12	12	-25	50	NBR	U133X5156 $_{12}$	-	496895	-	-	8	8	9.0/10.1/10.2	8310
	6	680	0	-	12	-25	65	NBR	U133X5196 $_{2}$	-	496565	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2	8169
	6	680	0	-	12	-25	65	NBR	U133X5196 $_{2}$	-	492210	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2	6904
	6	680	0	12	12	-25	65	NBR	U133X5196 $_{2}$	-	492310	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2	6904
	6	680	0	12	12	-25	65	NBR	U133X5196 $_{2}$	-	496555	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8169
	6	680	0	12	12	-25	65	NBR	U133X5196 $_{2}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8169
	6	680	0	12	12	-25	50	NBR	U133X5196 $_{2}$	-	496895	-	-	8	8	9.0/10.1/10.2	8311
	6	680	0	-	12	-25	65	FKM	U133X5195 $_{2}$	-	496565	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2	8172
	6	680	0	12	12	-25	65	FKM	U133X5195 $_{2}$	-	492310	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2	3572
1/4" NPT	6	680	0	12	12	-25	65	FKM	U133X5195 $_{2}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8172
	6	680	0	-	12	-25	65	FKM	U133X5195 $_{2}$	-	492210	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2	3572
	6	680	0	12	12	-25	65	FKM	U133X5195 $_{2}$	-	496555	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8172
	6	680	0	12	12	-25	50	FKM	U133X5195 $_{2}$	-	496895	-	-	8	8	9.0/10.1/10.2	8315
	6	680	0	12	12	-40	65	VMQ	U133X7759 $_{1-2}$	-	496895	-	-	8	8	9.0;10.1;10.2;10.3	8312
	6	680	0	-	12	-40	65	VMQ	U133X7759 $_{1-2}$	-	496565	-	0-20 EX ia IIB/IIC T4 to T6	-	0.3	9.0;10.1;10.2;10.3	8539
	6	680	0	12	12	-40	65	VMQ	U133X7759 $_{1-2}$	-	497105	-	1-21 Ex db IIC T4 to T6	8	8	9.0;10.1;10.2;10.3	8537
	6	680	0	12	12	-40	65	VMQ	U133X7759 $_{1-2}$	-	496700	-	1-21 Ex db mb IIC T4 to T6	6	6	9.0;10.1;10.2;10.3	8545
	6	680	0	12	12	-40	65	VMQ	U133X7759 $_{1-2}$	-	492310	-	1-21 Ex db II T4 to T5	9	8	9.0;10.1;10.2;10.3	8548
	6	680	0	-	12	-40	65	VMQ	U133X7759 $_{1-2}$	-	492210	-	1-21Ex eb mb IIC T5 to T6	-	1.8	9.0;10.1;10.2;10.3	8548
	6	680	0	12	12	-40	65	VMQ	U133X7709 $_{2}$	-	496895	-	-	8	8	9.0;10.1;10.2;10.3	8551
	6	680	0	-	12	-40	65	VMQ	U133X7709 $_{2}$	-	496565	-	0-20 Ex ia IIB/IIC T4 to T6	-	0.3	9.0;10.1;10.2;10.3	8550
	6	680	0	12	12	-40	65	VMQ	U133X7709 $_{2}$	-	497105	-	1-21 Ex db IIC T4 to T6			9.0;10.1;10.2;10.3	8401
	6	680	0	12	12	-40	65	VMQ	U133X7709 $_{2}$	-	496700	-	1-21 Ex db mb IIC T4 to T6			9.0;10.1;10.2;10.3	8550
	6	680	0	12	12	-40	65	VMQ	U133X7709 $_{2}$	-	492310	-	1-21 Ex mb II T4 to T5			9.0;10.1;10.2;10.3	8400
	6	680	0	-	12	-40	65	VMQ	U133X7709 $_{2}$	-	492210	-	1-21 Ex eb mb IIC T5 to T6			9.0;10.1;10.2;10.3	8400

Notes:
1. With manual override
2. Valve delivered with an individual material traceability certificate (3.1following EN10204)

316L STAINLESS ST.
PIPE MOUNTING
UNIVERSAL- MANUAL RESET

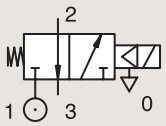


Port size	Orifice Ø	Flow factor	Operating Pressure Differential			Fluid Temp.		Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
			Min	Max(MOPD)		Min	Max										
	mm	Qn l/min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
1/4" NPT	6	680	0	12	12	-25	65	NBR	U033X5156 $_{1}$	-	492310	1-21	Ex mb II T4 to T5	6	6	10.1/10.2/12.0	7770
	6	680	0	12	12	-25	65	NBR	U033X5156 $_{1}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	10.1/10.2/12.0	8168
	6	680	0	12	12	-25	65	NBR	U033X5156 $_{1}$	-	496555	1-21	Ex db mb IIC T4 to T6	6	6	10.1/10.2/12.0	8168
	6	680	0	12	12	-25	65	NBR	U033X5156 $_{1}$	-	496895	-	-	8	8	10.1/10.2/12.0	8310
	6	560	0	-	12	-25	65	NBR	U033X5195 $_{1}$	-	496565	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2/12.0	3594
	6	560	0	12	12	-25	65	NBR	U033X5195 $_{1}$	-	492310	1-21	Ex mb II T4 to T5	6	6	9.0/10.1/10.2/12.0	3594
	6	560	0	12	12	-25	65	NBR	U033X5195 $_{1}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/12.0	3594
	6	560	0	-	12	-25	65	NBR	U033X5195 $_{1}$	-	492210	1-21	Ex eb mb IIC T5 to T6	-	1 to 1.8	9.0/10.1/10.2/12.0	3594
	6	560	0	12	12	-25	65	NBR	U033X5195 $_{1}$	-	496555	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/12.0	3594
	6	560	0	12	12	-25	65	NBR	U033X5195 $_{1}$	-	496895	-	-	8	8	9.0/10.1/10.2/12.0	8314
	6	680	0	12	12	-40	65	VMQ	U033X7759 $_{1}$	-	496895	-	-	8	8	9.0/10.1/10.2/10.3	8310
	6	680	0	12	12	-40	65	VMQ	U033X7759 $_{1}$	-	497105	1-21	Ex db mb IIC T4 to T6	8	8	9.0/10.1/10.2/10.3	8537
	6	680	0	12	12	-40	65	VMQ	U033X7759 $_{1}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/10.3	8545
	6	680	0	12	12	-40	65	VMQ	U033X7759 $_{1}$	-	492310	1-21	Ex mb II T4 to T5	9	8	9.0/10.1/10.2/10.3	8546

Notes:
1. Valve delivered with an individual material traceability certificate (3.1following EN10204)

Valves integrable in complete
SIL 3 safety loops (IEC 61508).

316L STAINLESS ST.
PIPE MOUNTING
NORMALLY CLOSED

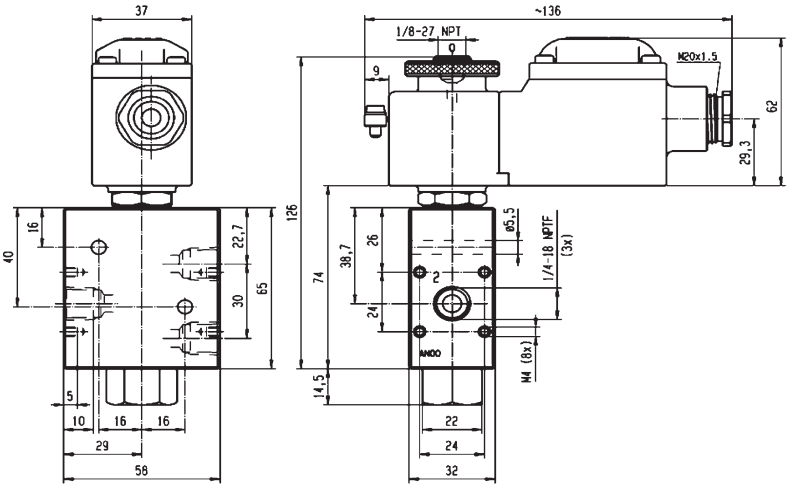


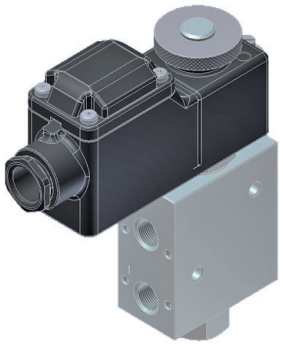
Port size	Orifice Ø	Flow factor	Operating Pressure Differential			Fluid Temp.		Seat Seal	Valve Ref.	Housing Ref.	Coil Ref.	ATEX Zone	Protection Mode	Power		Coil Group	Dwg. No.
			Min	Max(MOPD)		Min	Max										
	mm	Qn l/min	bar	AC bar	DC bar	°C	°C							AC W	DC W		
1/2" NPT	14	2500	3	-15	15	-30	65	VMQ	U331X2309 $_{1}$	-	496895	-	-	8	8	9.0/10.1/10.2/10.3	8316
	14	2500	3	15	15	-30	65	VMQ	U331X2309 $_{1}$	-	496565	0-20	Ex ia IIB/IIC T4 to T6	-	0.3	9.0/10.1/10.2/10.3	8316
	14	2500	3	15	15	-30	65	VMQ	U331X2309 $_{1}$	-	497105	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.2/10.3	8316
	14	2500	3	15	15	-30	65	VMQ	U331X2309 $_{1}$	-	496700	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/10.3	8316
	14	2500	3	15	15	-30	65	VMQ	U331X2309 $_{1}$	-	492310	1-21	Ex mb II T4 to T5	9	8	9.0/10.1/10.2/10.3	8316
	14	2500	3	15	15	-30	65	VMQ	U331X2309 $_{1}$	-	496555	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2/10.3	8316

Notes:

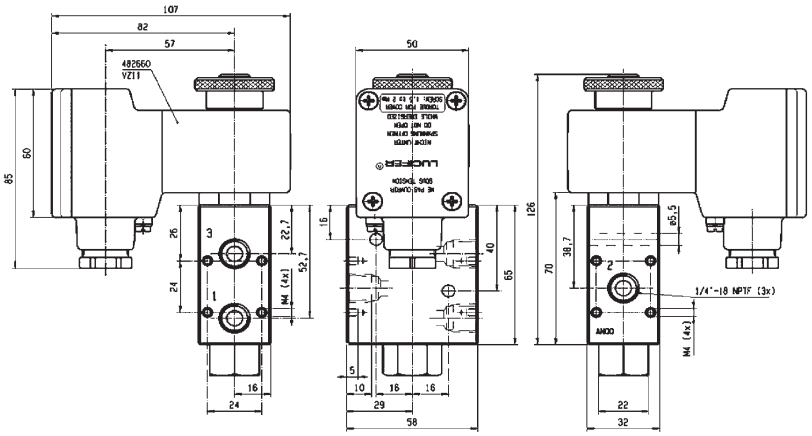
1. Valve delivered with an individual material traceability certificate (3.1following EN10204)

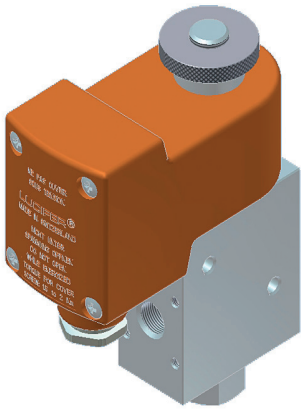
Valves integrable in complete
SIL 3 safety loops (IEC 61508).



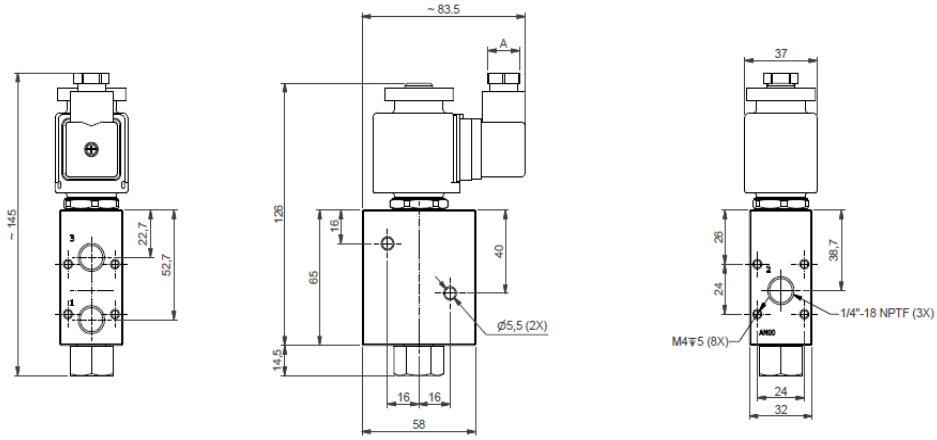


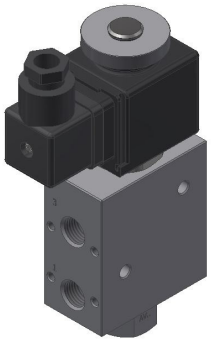
Drawing 8168



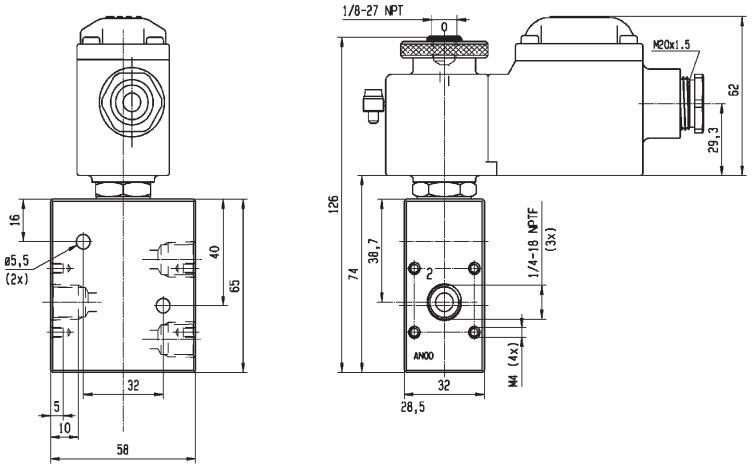


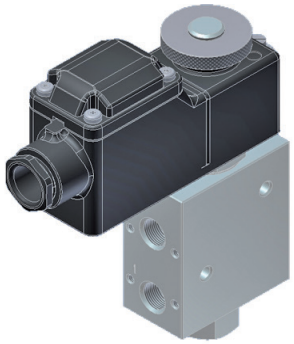
Drawing 7770



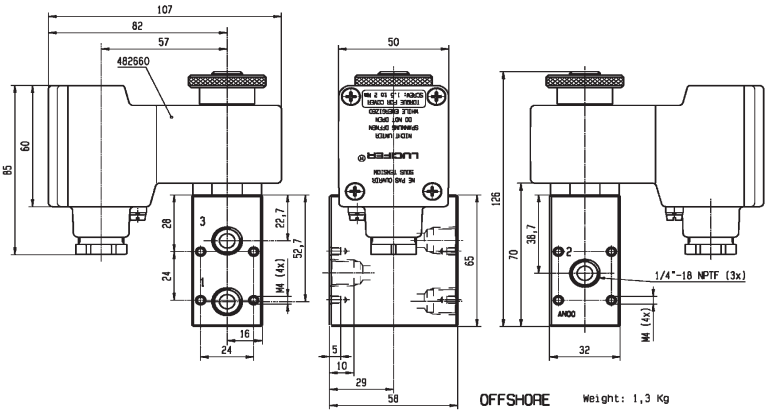


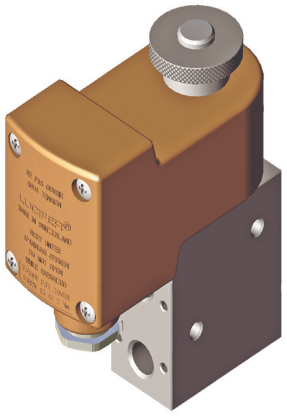
Drawing 8310



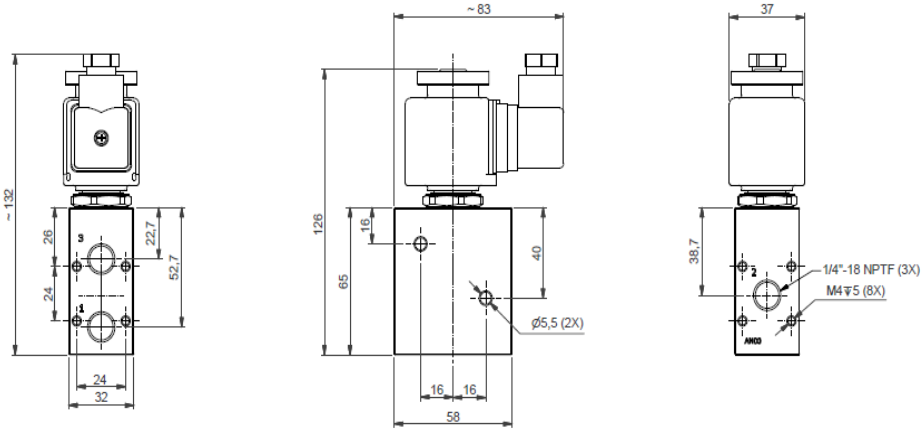


Drawing 8169

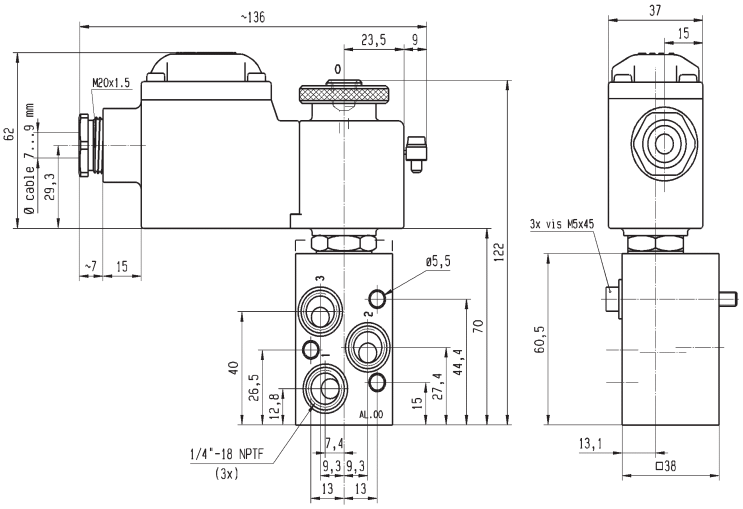


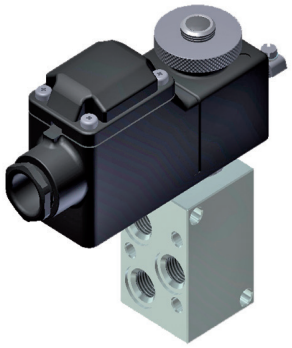


Drawing 6904

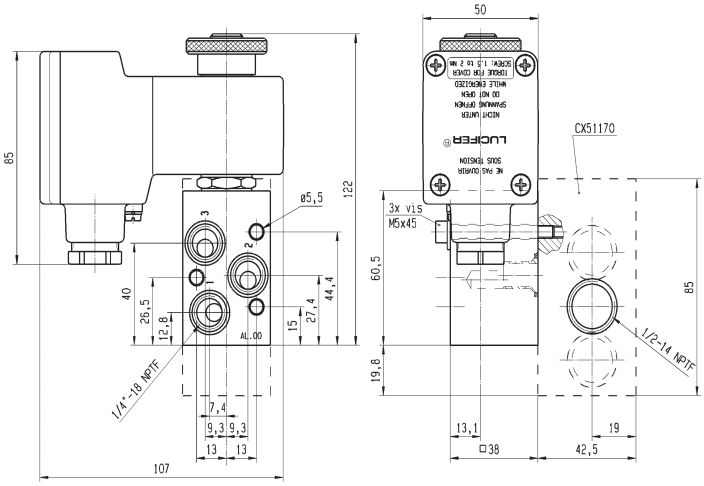


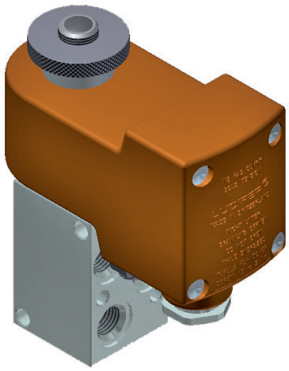
Drawing 8311



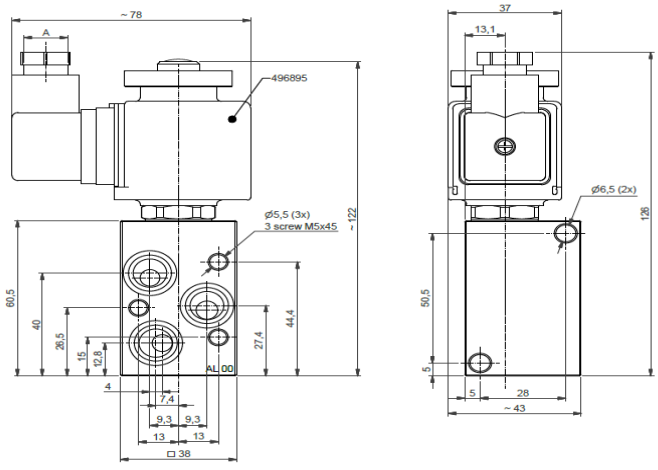


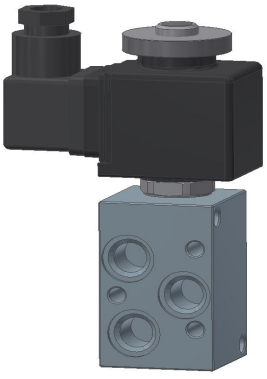
Drawing 8172



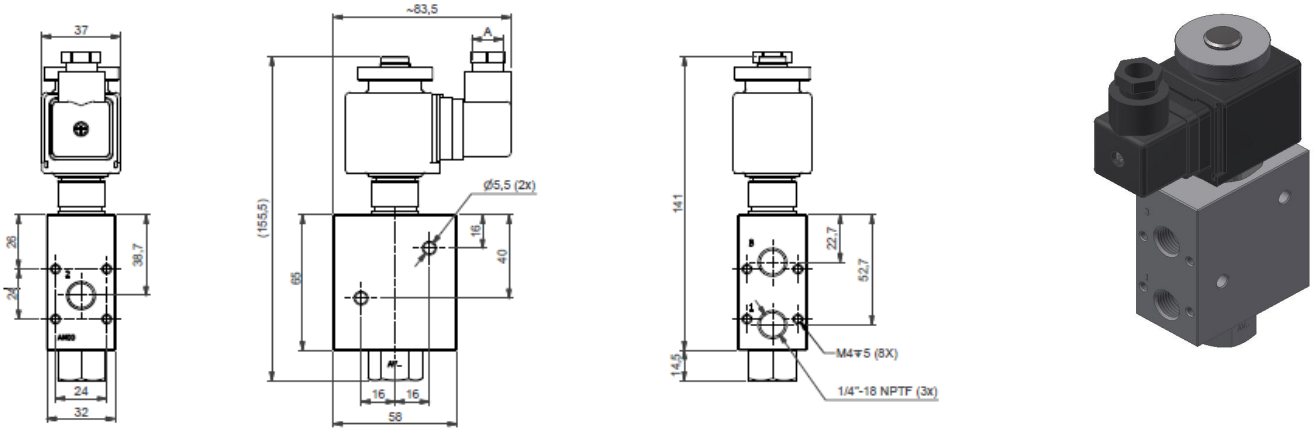


Drawing 3572

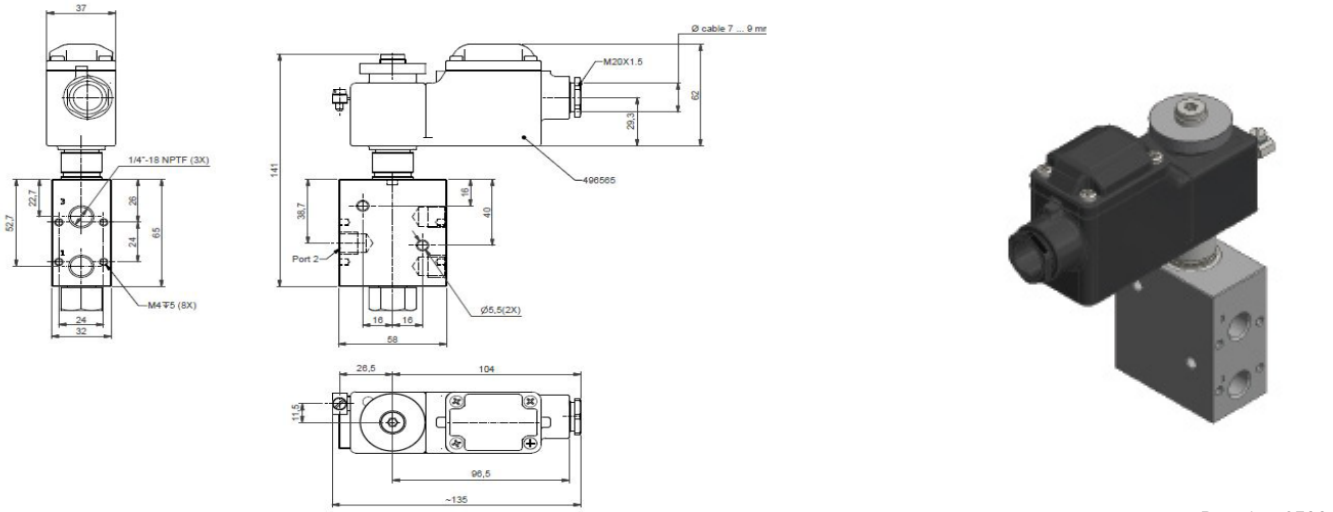




Drawing 8315

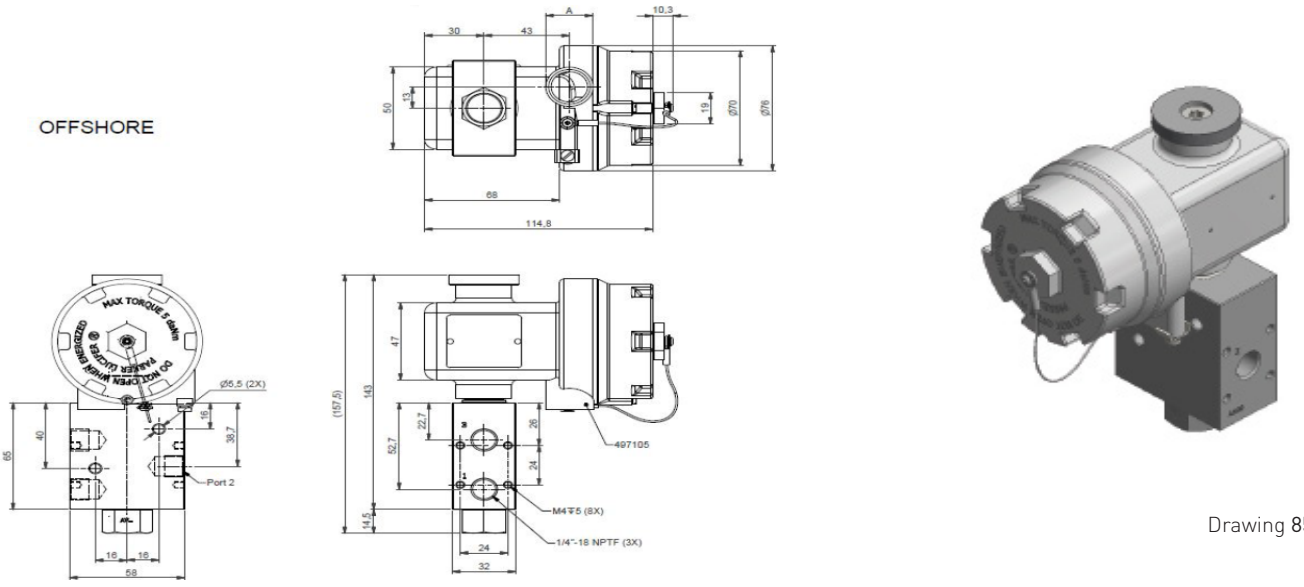


Drawing 8312

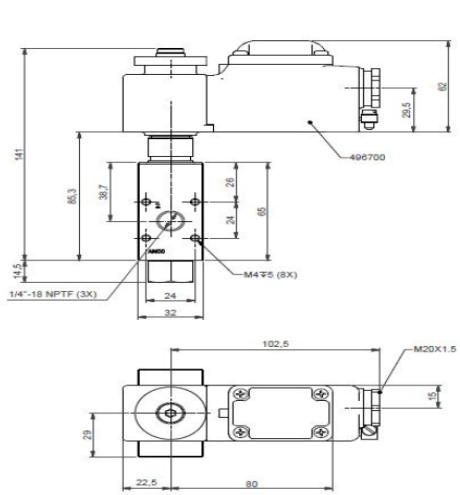


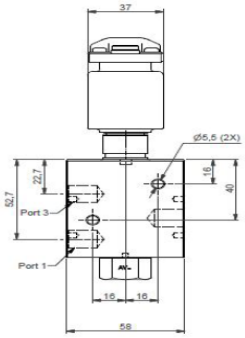
Drawing 8539

OFFSHORE

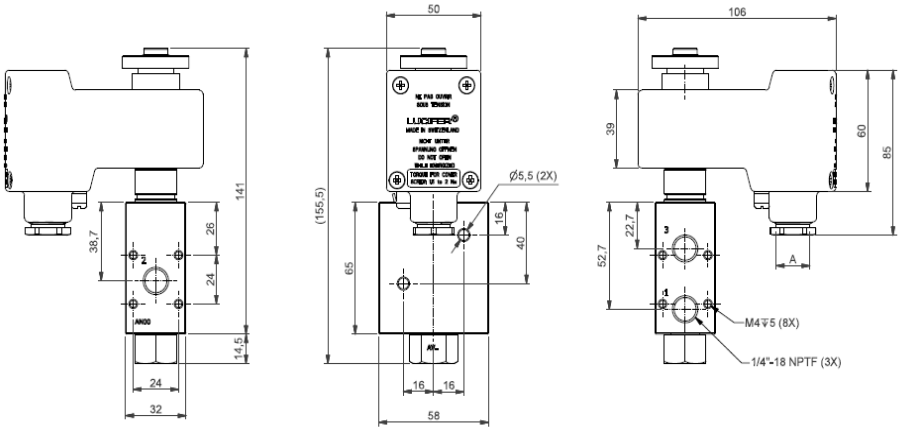


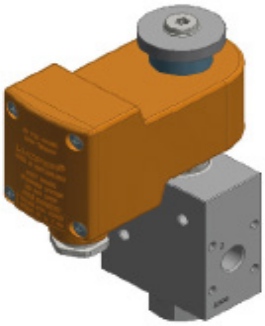
Drawing 8537



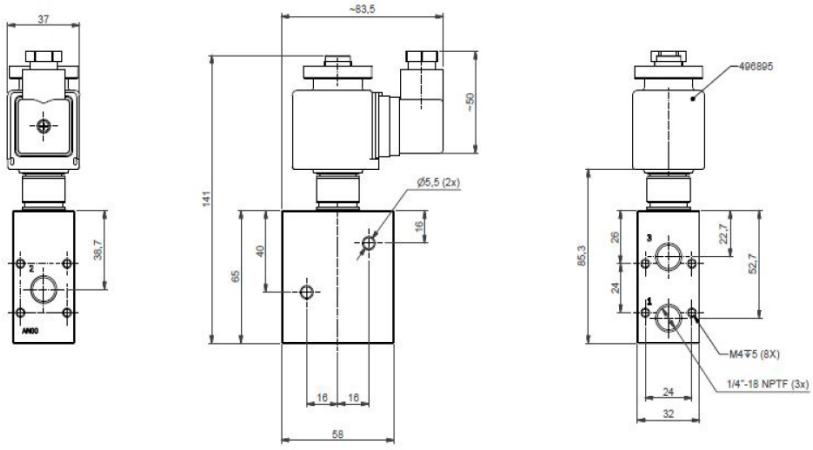


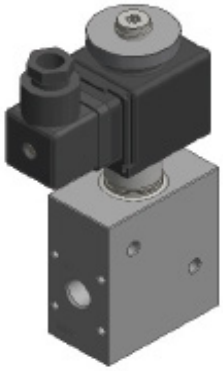
Drawing 8545



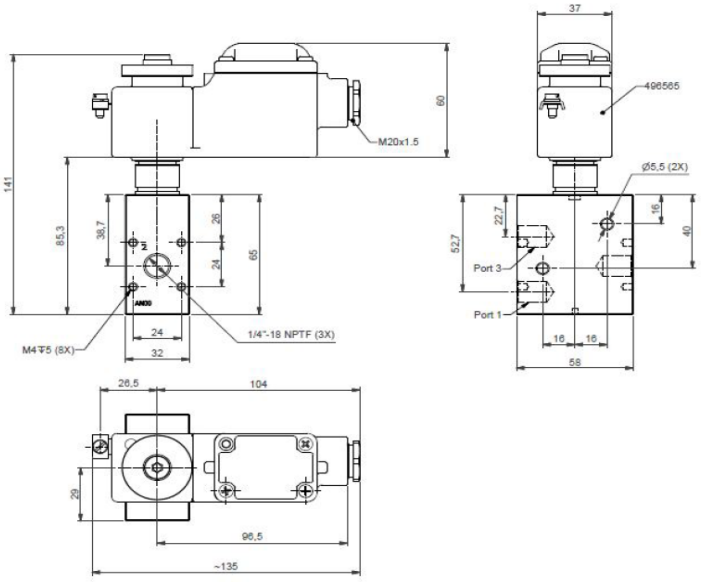


Drawing 8548

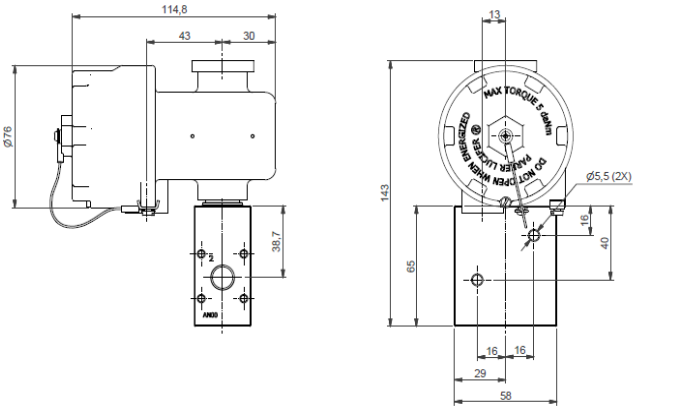


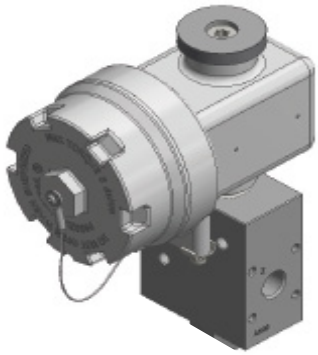


Drawing 8551

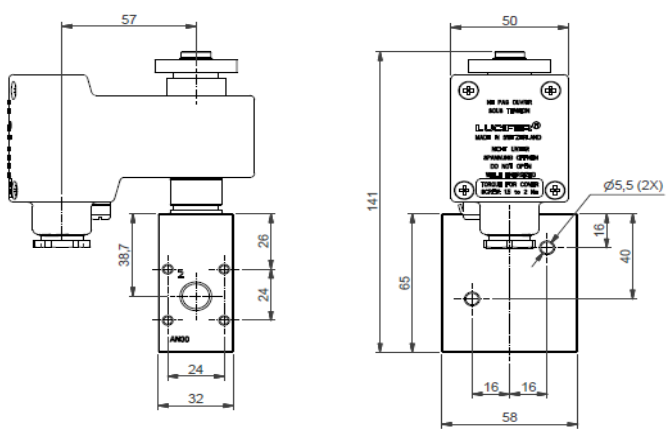


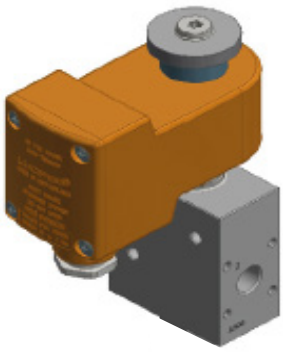
Drawing 8550



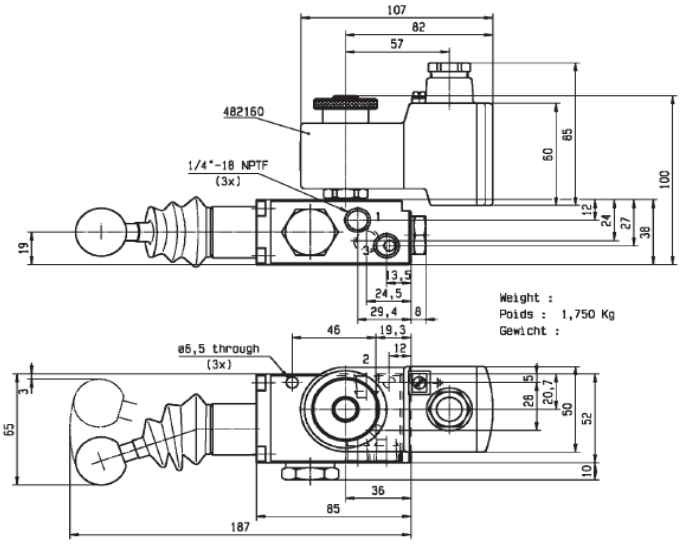


Drawing 8401

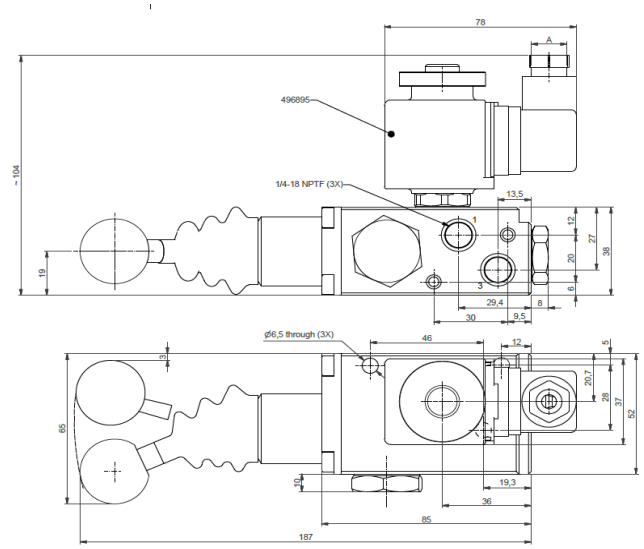


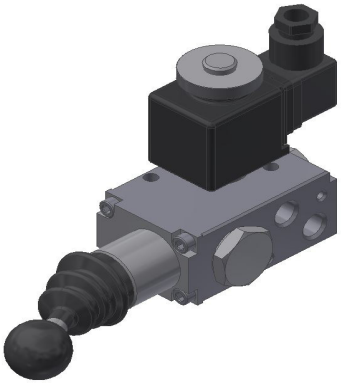


Drawing 8400

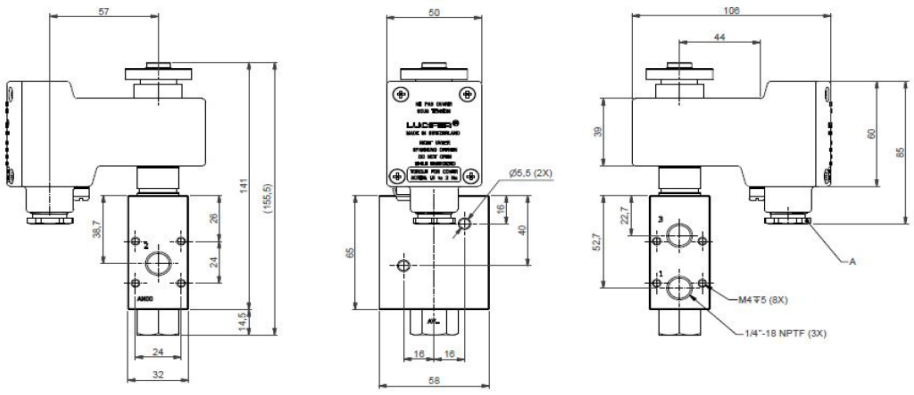


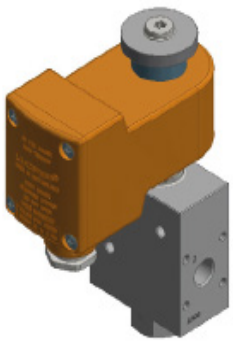
Drawing 3594



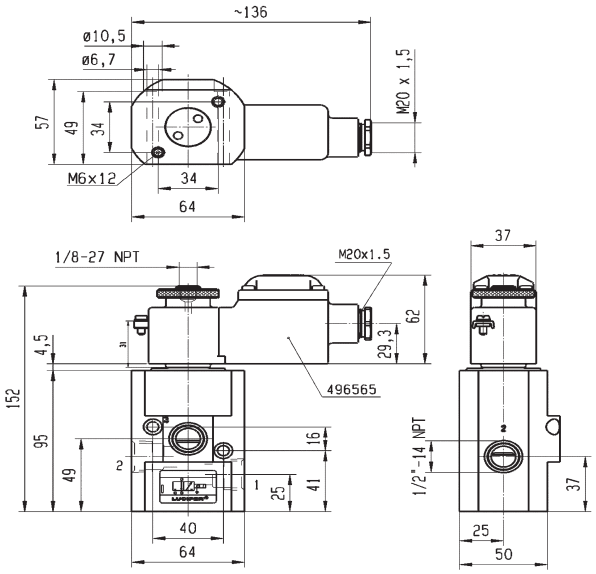


Drawing 8314





Drawing 8546

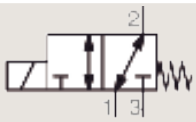


Drawing 8316

3 WAY VALVES DIRECT OPERATED

LOW POWER A03 SERIES MANUAL RESET, STAINLESS STEEL VALVES FOR PIPE MOUNTING

316L STAINLESS ST.
PIPE MOUNTING
UNIVERSAL



Port size	Orifice Ø	Flow factory KV		Operating Pressure Differential (bar)		Ambient Temp.(1)		Basic part number Body	Power level	Power (cold)		Dwg. No.
						Min	Max			AC	DC	
	mm	m³/h	l/min	Min	Max ~/=	°C	°C	AISI 316L	~/=	W	W	
1/4" NPT	5.7	0.45	7.5	0	10	-45	100	**A03RN*24**-R**	RP	3.6	3.6	1
	5.7	0.45	7.5	0	10	-45	100	**A03RN*24**-L**	LP	-	1.8	1

Notes:
Please define the complete ordering system in accordance with the desired configuration.
The Numbering system configurator is shown below:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	0	3	R	N	2	4	M	O	-	L	R	D	N	C	2

4 : Body material

R	SS, 316L

5,6 : Body pipe size

N2	1/4'' NPT
G2	1/4'' BSPP

7: Ambient temp.

4	-45*C to 100*C

8,9: Manual operator selection

MN	None manual operator function
MO	Manual operator function
MS	Manual reset function

11: Coil power level

R	Reduce power, 3, 2-3, 6 W
L	Low power, 1.5-1.8 W

12,13,14 : Coil type and cable thread

ADM	NPT 1/2	Flameproof-Alluminium, "d" type Ex housing (EN/IEC 60079-31)
ADM	M20X1.5	
RDN	NPT 1/2	Flameproof-316 SS, "d" type Ex housing (EN/IEC 60079-31)
RDM	M20X1.5	

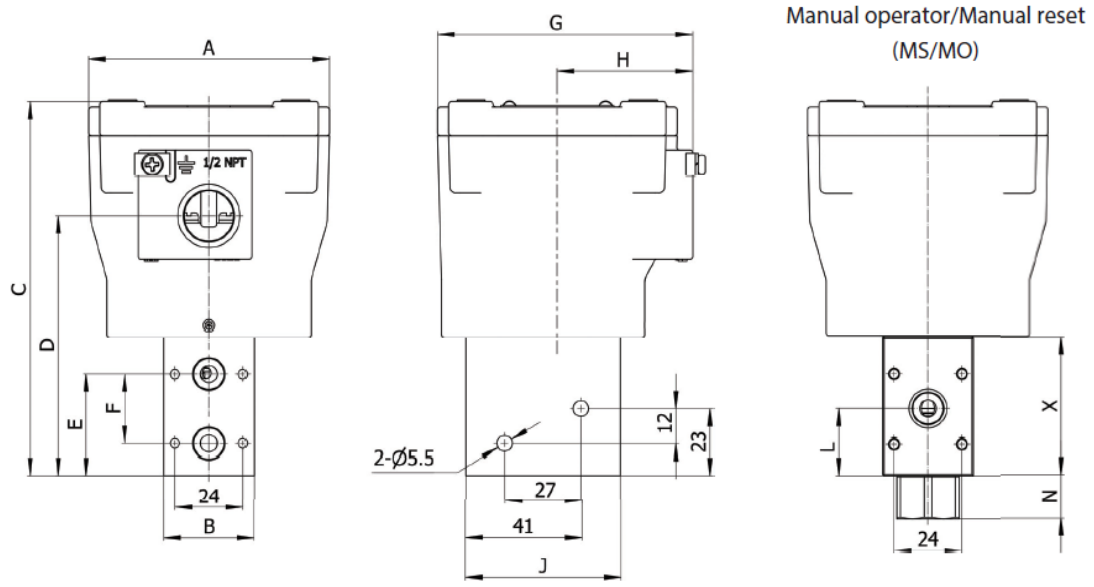
15,16: Coil voltage

C1	12VDC	RP,LP Available
C2	24VDC	RP, LP Available
C4	48VDC	RP,LP Available
C5	110VDC	RP,LP Available
3N	125VDC	RP Available
B1	24 W / 50 Hz	RP Available
B2	24 W / 60 Hz	RP Available
E6	100 V / 50 Hz	RP Available
0A	110-120 V / 50 Hz	RP Available
F2	200 V / 50 Hz	RP Available
3D	220-230 V / 50 Hz	RP Available
K7	110 V / 60 Hz	RP Available
3K	100-120 V / 60 Hz	RP Available
J2	200 V / 60 Hz	RP Available
7J	220-230 V /60 Hz	RP Available

Coil specification	Reduced Power (RP)		Low Power (LP)	
	hot	cold	hot	cold
	3.2 W	3.6 W	1.5 W	1.8 W
Safety code	II2G Ex d IIC Gb T6/T5/T4 II2D Ex t IIIC Db		II2G Ex d IIC Gb T6/T5/T4 II2D Ex t IIIC Db	
Electrical enclosure protection (EN 60529)	IP66/67 , Al/SS		IP66/67 , Al/SS	
Operator ambient temperature range (C)	-60 to + 65/80/110*C		-60 to + 65/80/110*C	

(1) Valve temperature range:
The valve temperature range (TS) is determined by the selected seal material , the temperature range for proper operations of the valve and sometimes by the fluid

(2) Operator ambient temperature range:
The operator ambient temperature range is determinated by the selected power level and the safety code.



Drawing 1

Coil Type	A	B	C	D	E	F	G	H	J	L	N	X	Weight (Kg)
RDN,RDM	85	32	130	90	35	24	91	48	55	23	54	48	2.78
ADN,ADM	85	32	130	90	35	24	91	48	55	23	54	48	1.75

Coil Availability

COIL GROUP
10.1

COILS FOR
DIN PLUG CONNECTION

COIL FOR OIL AND GAS 37 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

This is an encapsulated assembly comprising a coil, integral magnetic iron path and snap-on plug connection.

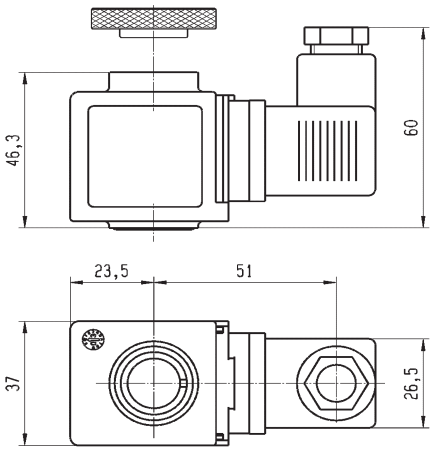
The synthetic material encapsulation provides an effective compact housing, offering full protection against dust, oil, water, etc.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive. DIN plug connector included (The AC electrical connection is delivered with a rectifier bridge).

Specification			Coil for Oil and Gas			
Reference (with DIN plug)			496895			
Coil group			10.1			
Degree of protection			**IP65** according to IEC / EN 60529 standards			
Class of insulation			H 180°C			
Electrical connection			With DIN plug 492459 (AC) or 486586 (DC)			
Ambient temperature			-40°C to +50°C The application is limited also by the temperature range of the valve.			
Elect. Power	DC	Pn (hot)	8 W			
		P (cold) 20°C	-			
	AC	Pn (holding)	8 W			
		Attraction cold	-			
Weight			273 g			
Voltages "Un"			VAC/Hz	Code	VDC	Code
-10% to +10% of the Un			230/50-60	P9	24	C2

To Order a Coil choose Coil Ref + Voltage Code, example: 496895 for 24 VDC = 496895C2
More voltage possibilities can be found in the table of voltage codes at the end of the coil section.
The fixing nut (housing kit) is already inclued in the coil kit.



COIL GROUP
10.3

FLAMEPROOF
ELECTRICAL PARTS
"db"

497105 & 497105.02 - ELECTRICAL PARTS

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db IIC T4 / T5 / T6 is required.

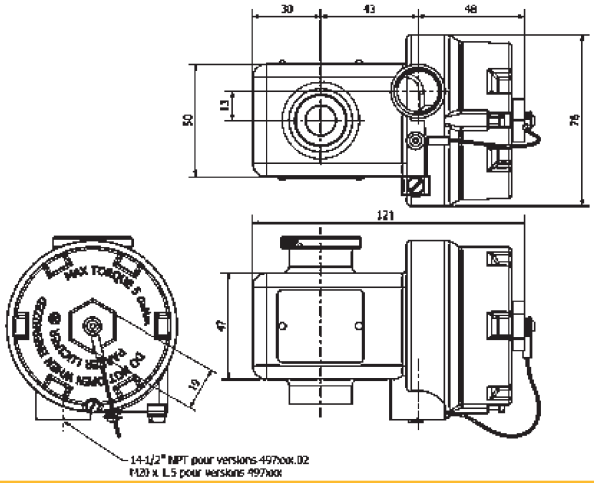
Benefits: Rotatable 360°, stainless steel with internal and external screw terminals for earth connection.

Small size for ease of mounting in confined space. Simplifies conversion of existing equipement to hazardous area requirements.

Reference			**497105 (M20x1.5)** **497105.02 (NPT 1/2")**			
Certificate			**INERIS 12ATEX0041X - IECEx INE 12.0034X**			
Coil Group			**10.3**			
Type of protection	**Gas**		II 2 G - Ex db IIC T4 / T5 / T6			
	Dust		II 2 D - Ex tb IIIC - 130°C / 95°C / 80°C			
Degree of protection			**IP66** (with relevant cable gland) according to IEC/EN 60529 Standards			
Ambient temperature			-50°C to +80°C / +60°C / +40°C The operating temperature of the valve/coil can be limited by that of the valve			
Insulation Class			F 155°C			
Electrical connection			Electric connection is done in the connection chamber on an easily accessible connector terminals. The cable entry to the connection chamber is made through a 1/2" NPT or M20x1.5 thread in which an approved Exdb IIC cable gland must be installed.			
Electrical consumption	**DC**	**Pn (hot)**	8 W			
		P (cold) 20°C	9 W			
	AC	**Pn (holding)**	8 W			
		Attraction cold	9 W			
Voltage Tolerance			+/- 10% of nominal voltage			
Emergising Cuty			ED 100%			
Voltages			**VAC/Hz**	**Code**	**VDC**	**Code**
			24/50-60 110-115 / 50-60 220-230 / 50-60	P0 1P 3P	12 24 48 110	C1 C2 C4 C5

To Order a Coil choose Coil Ref + Voltage Code, example: 497105 for 24 VDC = 497105C2

Coil delivered with an individual material traceability certificate (3.1 following EN10204)



COIL GROUP
10.2/10.1

FLAME PROOF ENCAPSULATED
ELECTRICAL PARTS
"db mb"

496700 - ELECTRICAL PARTS 37 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

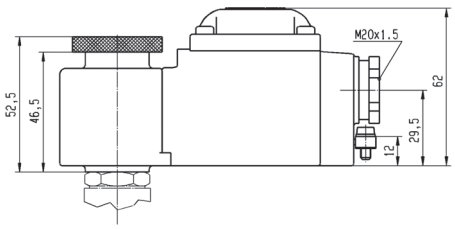
Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db mb IIC T4 to T6 is required.

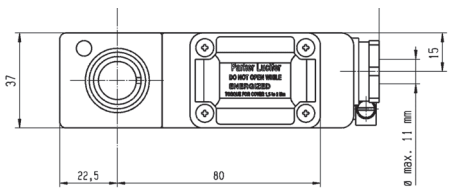
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

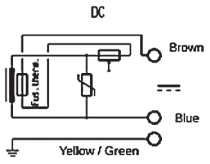
The plastic housing is delivered with 1/2" NPT or M20 x 1.5 threaded hole for wide range of cable glands. Small size for ease of mounting in confined space.

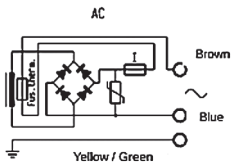
Reference			**496700 or 496700.02 (NPT)**			
Certificate			**LCIE 10 ATEX 3059 X - IECEx LCI 10.0023X**			
Coil Group			**10.2**			
Type of protection		**Gas**	II 2 G - Ex db mb IIC T4 / T5 / T6			
		Dust	II 2 D - Ex tb IIIC - T130 / 95 / 80°C			
Degree of protection			**IP67** according to IEC/EN 60529 Standards			
Ambiant temperature			-40°C to +35°C / +50°C / +65°C The application is limited also by the temperature range of the valve.			
Class of insulation			H (180°)			
Electrical connection			Electric connection is done in the connection box passes through a 1/2 NPT or M20x1.5 thread in which a certified Ex dBIIC cable gland must be installed			
Elect. Power	**DC**	**Pn (hot)**	-		6 W	
		P (cold) 20°C	-		7.5 W	
	AC	**Pn (holding)**	6 W		-	
		Attraction cold	7.5 W		-	
Voltages "Un"			**VAC/Hz**	**Code**	**VDC**	**Code**
-10% to +10% of the Un			230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5

To Order a Coil choose Coil Ref + Voltage Code, example: 496700 for 24 VDC = 496700C2









COIL GROUP
9.0

INCREASED SAFETY
AND ENCAPSULATED
ELECTRICAL PARTS "eb mb"

492210 - ELECTRICAL PARTS "BOOSTER" 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

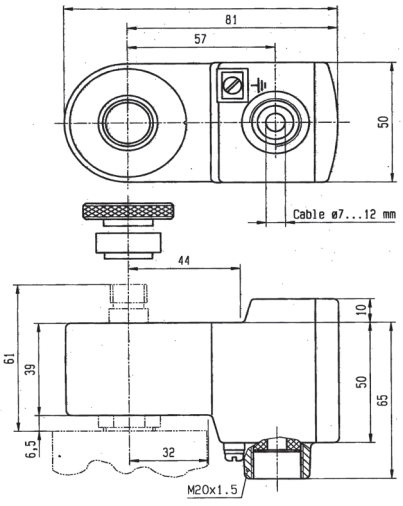
Application: Control of solenoid valves in dangerous areas where explosion-proof protection - Ex eb mb IIC T5/T6 is required.

Benefits: Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.

Available only in 24 VDC (suffix code : C2)

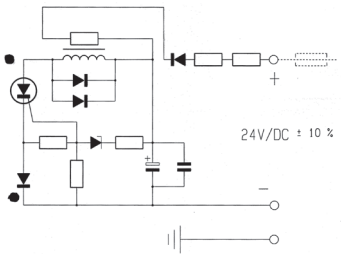
Reference		492210
Certificate		LCIE 02 ATEX 6023 X - IECEx LCI 06.0011 X
Coil group		9.0
Type of protection	Gas	II 2 G - Ex eb mb IIC T5 / T6
	Dust	II 2 D - Ex tb IIIC - T95°C / T80°C
Degree of protection		**IP66** according to IEC/EN 60529 Standards
Ambient temperature		-40°C to +75°C / +40°C The operating temperature of the valve/coil can be limited by that of the valve
Insulation Class		F 155°C
Electrical connection		Connection box with terminals and cable entry via gland M20 x 1.5 Possibility for additional earth via external screw
Power consumption DC		1 to 1.8 W according to length of cable
Attraction current		I min = 60 mA (I nominal = 75 mA)
Voltage DC		U nominal = 24 VDC (C2), Umin = 21.6 VDC
Resistance		23 Ω + (R = 270 Ω)
Inductance		0 mH
Capacitance		0 µF
Response time		2 - 4 s
Weight		500 g

To Order a Coil choose Coil Ref + Voltage Code, example: 492210 for 24 VDC = 492210C2



Indications:

Booster for Offshore valves



These electrical parts need an external fuse of I = 100 mA

COIL GROUP
10.2/10.1

FLAME PROOF ENCAPSULATED
ELECTRICAL PARTS
"db mb"

496555 - ELECTRICAL PARTS 37 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

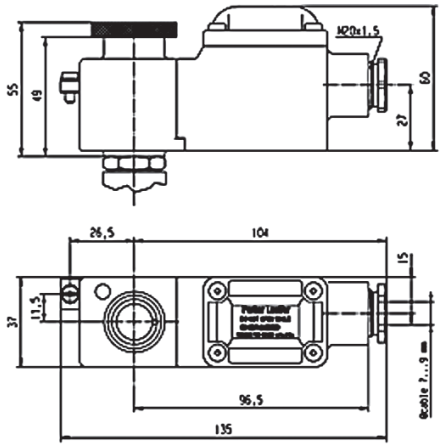
Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db mb IIC T4 to T6 is required.

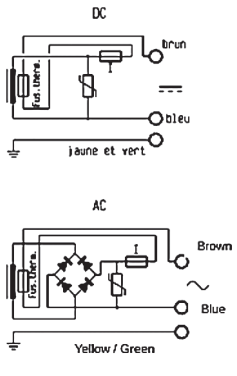
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

The plastic housing is delivered with M20 x 1.5 cable gland certified for use "db" protection. Small size for ease of mounting in confined space.

Reference			**496555**			
Certificate			**LCIE 07 ATEX 6075 X - IECEx LCI 07.0014X**			
Coil Group			**10.2**			
Type of protection		**Gas**	II 2 G - Ex db mb IIC T4 / T5 / T6			
		Dust	II 2 D - Ex tb IIIC - T130°C / 95°C / 80°C			
Degree of protection			**IP 67** according to IEC/EN 60529 Standards			
Ambiant temperature			-40°C to +65 / 50 / 35°C The application is limited also by the temperature range of the valve.			
Class of insulation			H (180 °)			
Electrical connection			Electric connection is done in the connection box on an easily accessible connector terminals. The introduction of the cable (Ø min 5 mm, Ømax. 11 mm, section max. 2.5 mm²) in the connection box passes by the built in M20 x 1.5 cable gland.			
Elect. Power	**DC**	**Pn (hot)**	-		6 W	
		P (cold) 20°C	-		7.5 W	
	AC	**Pn (holding)**	6 W		-	
		Attraction cold	7.5 W		-	
Voltages "Un" -10% to +10% of the Un			**VAC/Hz**	**Code**	**VDC**	**Code**
			230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5

To Order a Coil choose Coil Ref + Voltage Code, example: 496555 for 24 VDC = 496555C2





COIL GROUP
9.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"

492965 ELECTRICAL PART "BOOSTER" "IS" 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

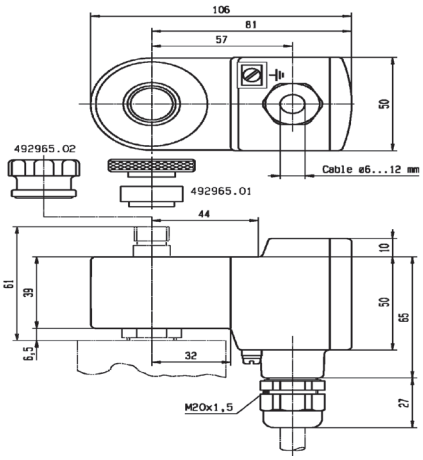
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC - T6 is required.

Benefits: Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.

Reference			**492965.01 - (Stainless steel fixation)** **492965.02 - (Plastic fixation)**
Certificate			**LCIE 02 ATEX 6066 X - IECEx LCI 07.0007 X**
Coil Group			**9.0**
Type of protection	**Gas**		Il 1 G - Ex ia IIC - T6
	Dust		Il 1 D - Ex ta IIIC - T80°C
Degree of protection			**IP66** according to IEC/EN 60529 Standards
Ambiant temperature			- 40°C to +65°C The application is limited also by the temperature range of the valve.
Electrical connection			Cable connection through a plastic or stainless steel cable gland M20 x 1.5 allowing use of cable diameter from 10 to 12 mm. Additional earth connection possible with external screw terminal.
Class of insulation			H180°C
Maximum supply voltage			28 VDC (N7) - 110 mA
Power	**DC**	**Minimum**	0.3 W (with 13 VDC)
		Maximum	2.3 W (with 24 VDC)
			Depending on applied voltage, IS barrier type and resistance of connected cable
Line check			4 mA or 5 VDC max
Coil resistance at 20°C **Impedance** **Apparent inductance** **Apparent capacitance**			85 Ω 275 Ω (with 13 VDC) - 260 Ω (with 24 VDC) 0 mH 0 µF
Response time			2 - 4 s
Weight			500 g

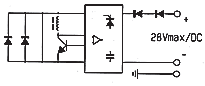
To Order a Coil choose Coil Ref + Voltage Code, example: 492965.01 for 28 VDC = 492965.01N7



Important

The intrinsically safe supply circuit should have enough capacity in all environmental conditions to assure a minimum operating current of 29 mA through the coil.

The minimal holding current is 20 mA.



For the barrier compatibility see the corresponding table in appendix section.

COIL GROUP
12.0

INTRINSICALLY SAFE
ELECTRICAL PARTS
"ia"

482870.01 ELECTRICAL PART "IS" 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

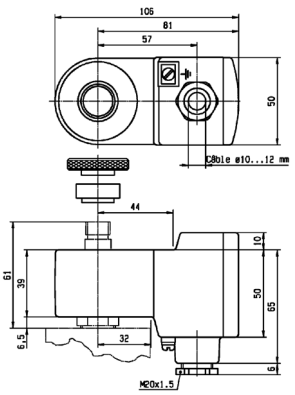
Application: Control of solenoid valves in dangerous areas where an explosion-proof protection Ex ia IIC or IIB T6 is required.

Benefits: Rotatable 360° housing, polyamid with fibreglass housing and cover. Coil, electronic circuits and other elements required for intrinsic safety are completely encapsulated in the housing with epoxy material for shock and corrosion protection.

Small size for ease of mounting in confined space.

Reference			482870.01
Certificate			LCIE 02 ATEX 6024 X
Coil Group			12.0
Type of protection		Gas	II 1 G - Ex ia IIC - T6
		Dust	II 1 D - Ex ta IIIC - T80°C
Degree of protection			**IP66** according to IEC/EN 60529 Standards
Ambiant temperature			- 40°C to +65°C The application is limited also by the temperature range of the valve.
Class of insulation			H180°C
Electrical connection			Cable connection through a stainless steel cable gland M20 x 1.5 allowing use of cable diameter from 10 to 12 mm. Additional earth connection possible with external screw terminal.
Maximum supply voltage			28 VDC (N7) - 110 mA
Power	DC	Minimum	300 mW
		Maximum	3 W
			Depending on applied voltage, IS barrier type and resistance of connected cable
Coil resistance at 20°C Impedance Apparent inductance Apparent capacitance			295 Ω 345 Ω 0 mH 0 µF
Weight			500 g

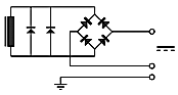
To Order a Coil choose Coil Ref + Voltage Code, example: 482870.01or 28VDC = 482870.01N7



Important

The intrinsic safety supply circuit must have sufficient capacitance in all ambient conditions to guarantee a minimum operating current in excess of 29 mA across the coil.

The minimum current for holding in the energised position is 20 mA



For the barrier compatibility see the corresponding table in appendix section.

COIL GROUP
10.1

INCREASED SAFETY
AND ENCAPSULATED
ELECTRICAL PARTS "eb mb"

492310 - ELECTRICAL PARTS 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

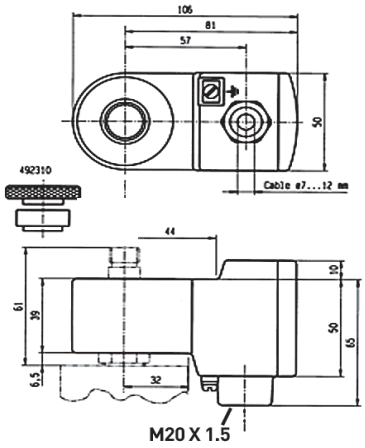
Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex eb mb II T4 to T5 is required.

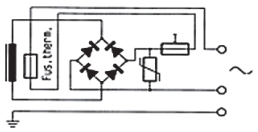
Benefits: Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

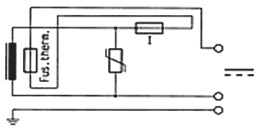
Small size for ease of mounting in confined space.

Reference			**492310**			
Certificate			**LCIE 02 ATEX 6023 X - IECEx LCI 06.0011 X**			
Coil group			**10.1**			
Type of protection		**Gas**	II 2 G - Ex eb mb II T4 / T5			
		Dust	II 2 D - Ex tb IIIC - T130°C / T95°C			
Degree of protection			**IP66** according to IEC/EN 60529 Standards			
Ambiant temperature			-40°C to +75°C / to +40°C The operating temperature of the valve/coil can be limited by that of the valve			
Class of insulation			F 155°C			
Electrical connection			Connection box with terminals and cable entry via gland M20 x 1.5 - Possibility for additional earth via external screw.			
Elect. Power	**DC**	**Pn (hot)**	6 W			
		P (cold) 20°C	7.5 W			
	AC	**Pn (holding)**	6 W			
		Attraction cold	7.5 W			
Weight			500 g			
Voltages "Un"			**VAC/Hz**	**Code**	**VDC**	**Code**
-10% to +10% of the Un			230/50-60	P9	24 48	C2 C4

To Order a Coil choose Coil Ref + Voltage Code, example: 492310 for 24 VDC = 492310C2







COIL GROUP
9.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"

496565 ELECTRICAL PARTS "BOOSTER" "IS" 37 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

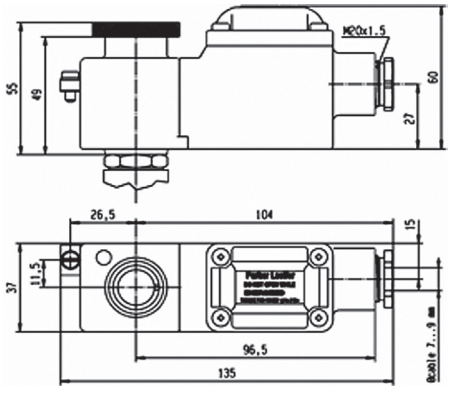
Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC T4 to T6 is required.

Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H).
Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

The plastic housing is delivered with M20 x 1.5 cable gland. Small size for ease of mounting in confined space. Available only in 28 VDC (code: N7).

Reference		**496565**	
Certificate		**LCIE 08 ATEX 6071 X - IECEx LCI 08.0030 X**	
Coil group		**9.0**	
Type of protection	**Gas**	II 1 G - Ex ia IIC - T4 / T5 / T6	
	Dust	II 1 D - Ex ta IIIC - T80 / T95 /T130°C	
Degree of protection		**IP67** according to IEC/EN 60529 Standards	
Ambiant temperature		- 40°C to +80 / 75 / 65°C The application might also be limited by the temperature range of the valve.	
Electrical connection		Cable connection through a plastic cable gland M20 x 1.5 allowing use of cable diameter from 7 to 12 mm. Additional earth connection possible with external screw terminal.	
Class of insulation		H180°C	
Minimum Courant of function		20 mA	
Minimum voltage of function at 60°C		28 VDC (N7)	
Safety parameters Maximum acceptable values: Ui (V) / Ii (mA) / Pi (W)		28 V / 110 mA / 0.77 W 27 V / 120 mA / 0.81 W 26 V / 135 mA / 0.88 W 25 V / 150 mA / 0.94 W 24 V / 170 mA/ 1.02 W	28 V / 280 mA / 1.96 W 27 V / 320 mA / 2.16 W 26 V / 350 mA / 2.27 W 25 V / 390 mA / 2.43 W 24 V / 430 mA/ 2.58 W
Line check		4 mA or 5 VDC max	
Apparent Impedance Typ. **Apparent Inductance** **Apparent Capacitance**		Attraction ~ 600 Ω - Holding ~ 570 Ω 0 mH 0 µF	
Response Time Typ.		2 - 4 s	
Weight		500 g	

To Order a Coil choose Coil Ref + Voltage Code,
example: 496565 for 28 VDC = 496565N7



Quality

Quality Assurance

Each valve carries its own identification number. It is sent out from the factory with a Quality Assurance Certificate ensuring the following:

Strategic Parts Identification

Strategic parts, i.e. parts which are directly involved in the valving process are identified.
Materials traceability of all identified parts is assured back to source.
Identified stainless steel parts have either a EN10204.3.1B declaration or a supplier's attest.

Final Test declaration

Confirms correct valve function at minimum and maximum rated pressures, with specified mains supply rating and checks that the maximal external & internal leakage rates values respect the valves specifications.

Certificate

Our organization is in compliance with ISO9001/14001 and OHSAS18001.

ATEX and IECEx certified electrical parts

Parker has a large range of certified coils working in hazardous locations (gaz and dust environment), for surface applications (Ex II).

The different existing technical solutions (ATEX & IECEx protection modes "ia", "d", "e" & "mb") allow our customers to face to every specific request.

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