

DC or AC valve solenoid

3

Product group

X BP

- According to DIN VDE 0580
- Armature space pressure tight up to 50 bar static pressure
- Armature with spring-supported sealing nipples at both ends
- Insulation materials of the excitation winding correspond to thermal class F
- Electrical connection and protection class when properly installed:
 - Plug connection by spade connectors according to DIN 46247
Protection class according to DIN VDE 0470 / DIN EN 60529 – IP 00
 - Plug connection via plug connector type Z KB according to DIN EN 175301-803
Cable gland (4 times 90° rotatable)
Protection class according to DIN VDE 0470 / DIN EN 60529 – IP 54
- Mounting via central thread
- Simple exchange of the solenoid body without opening the pneumatic circuit
- Please contact us for application related solutions
- Please take into consideration that the physically generated noise caused by AC solenoids may be disturbing in quiet rooms, particularly if mounted on a resonant base!
- Application examples:
Actuation of 2/2 and 3/2-way-seat-valves, especially for pneumatics and other gasiform and fluid neutral media

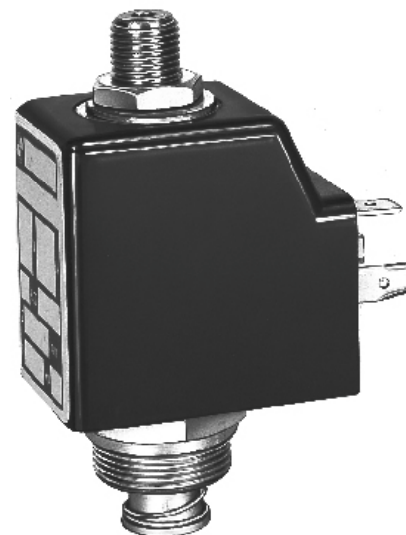


Fig. 1: X BP X 030 K54 A01

Technical data

X BP X 030			
Operating mode		S1 (100%)	
Rated Power P_{20}	DC	(W)	11
	AC	(VA)	30 / 22
Stroke s	(mm)		0,8
Reference temperature ϑ_{11}	(°C)		60
Magnetic force F_M (N) without spring	DC	Stroke 0 mm	36
		Stroke s mm	8,5
	AC	Stroke 0 mm	16,7
		Stroke s mm	8
Solenoid weight m_M	(kg)		0,2
Armature weight m_A	(kg)		0,015

Rated voltage \equiv 24 V, resp. 230 V / 50 Hz, the exciter coil can be adjusted to a rated voltage of maximum \equiv 250 V resp. 250 V / 50 Hz on request.

The force values indicated in the tables refer to 90% of the rated voltage without spring ($U_N = 24$ V resp. \equiv 230 V / 50 Hz, for other voltages deviations of the magnetic force may occur) and to the normal operating temperature. Due to natural dispersion the force values may deviate by + 10% from the values indicated in the tables.

We recommend using compressed air corresponding to DIN ISO 8573/1, class 3. Elastomer neutral oils should be used for lubricating the compressed air, otherwise we ask you to please contact the manufacturer.

The normal operation temperature is based on:

- Mounting on a valve block with the dimensions 50 x 50 x 22 mm
- Rated voltage: \equiv 24 V, AC 230 V / 50 Hz
- Operating mode S1 100%
- Reference temperature 60 °C

The response times and the maximum operating frequency are not indicated, because they depend on the respective application case and pressure. According to the application the maximum operating frequency may be up to 36.000 S/h.

These data apply to media compressed air for application as 3/2-way-valve de-energized closed. The nominal width of deaeration has to be adapted accordingly to the nominal width of the valve.

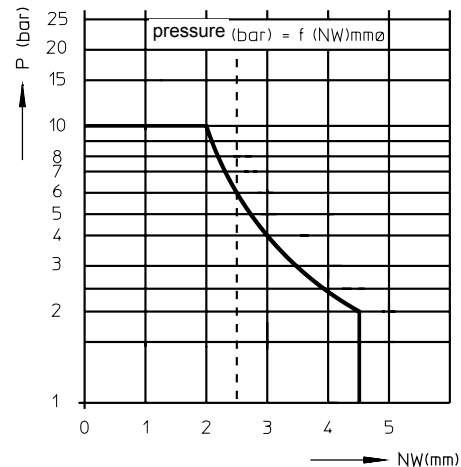



Fig. 2: Switchable pressure as function of the nominal width of the valve seat Standard type NW = \varnothing 2.5 mm

Information and remarks concerning European directives can be taken from the correspondent information sheet which is available under *Produktinfo.Magnet-Schultz.com*.

Note on the RoHS Directive

According to our current state of knowledge the devices pictured in this document do not contain any substances in concentration values or applications for which putting into circulation with products manufactured from them is prohibited in accordance to RoHS.

Please make sure that the described devices are suitable for your application. Supplementary information concerning its proper installation can be taken also from the  -Technical Explanation, the effective DIN VDE0580 as well as the relevant specifications.

This part list is a document for technically qualified personnel.

The present publication is for informational purposes only and shall not be construed as mandatory illustration of the products unless otherwise confirmed expressively.

Dimensional drawing

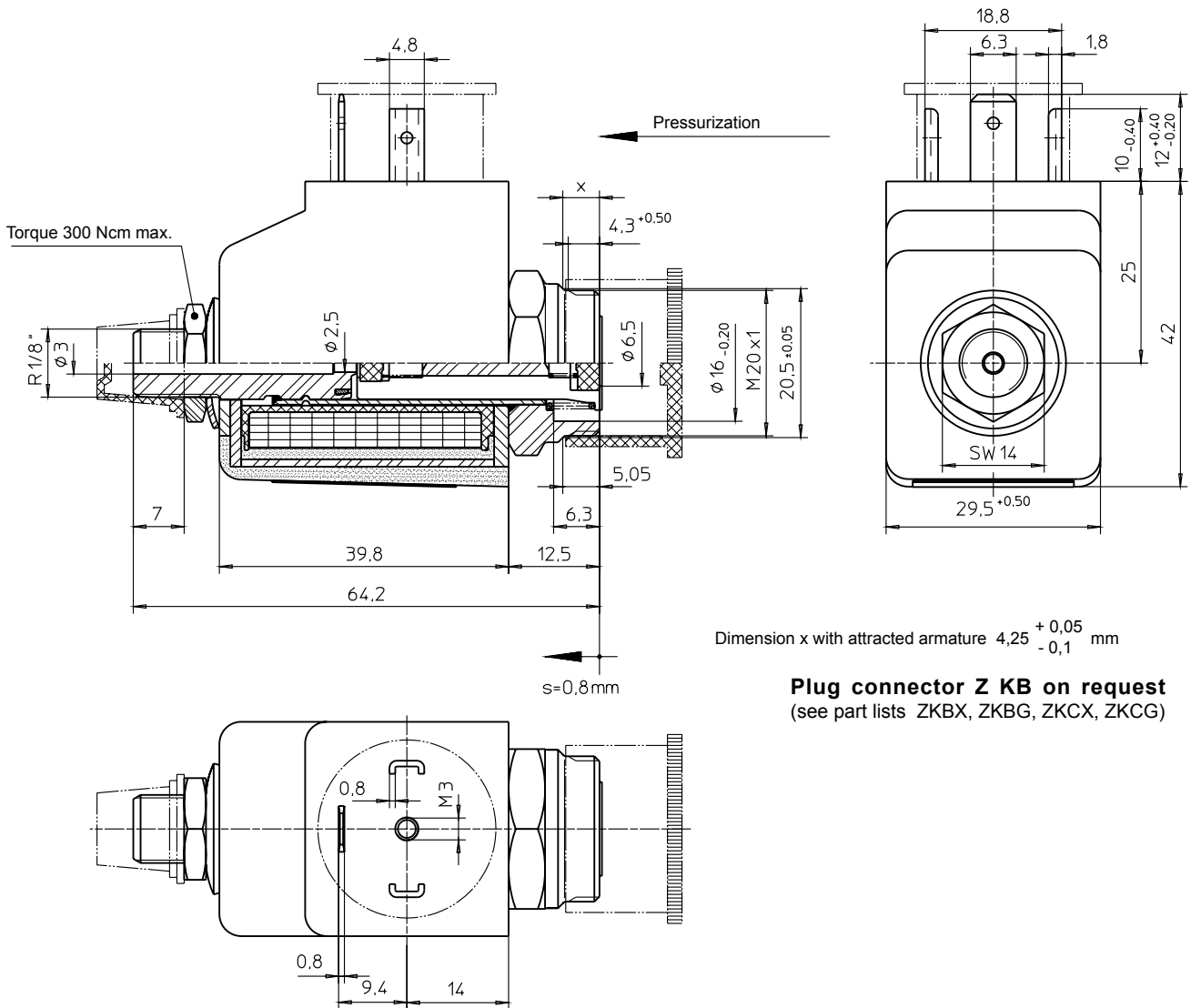


Fig. 3: X BPX 030 K54 A01

Application example and switching function

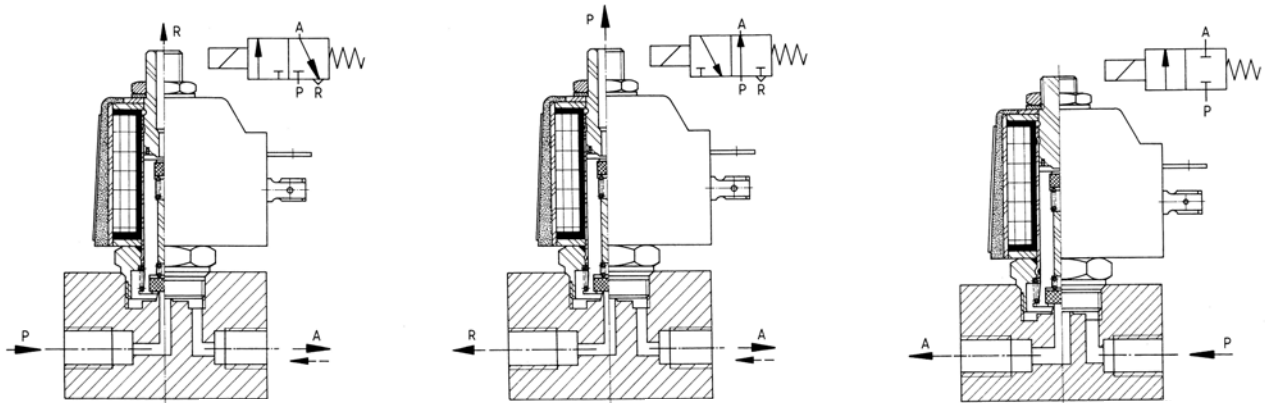
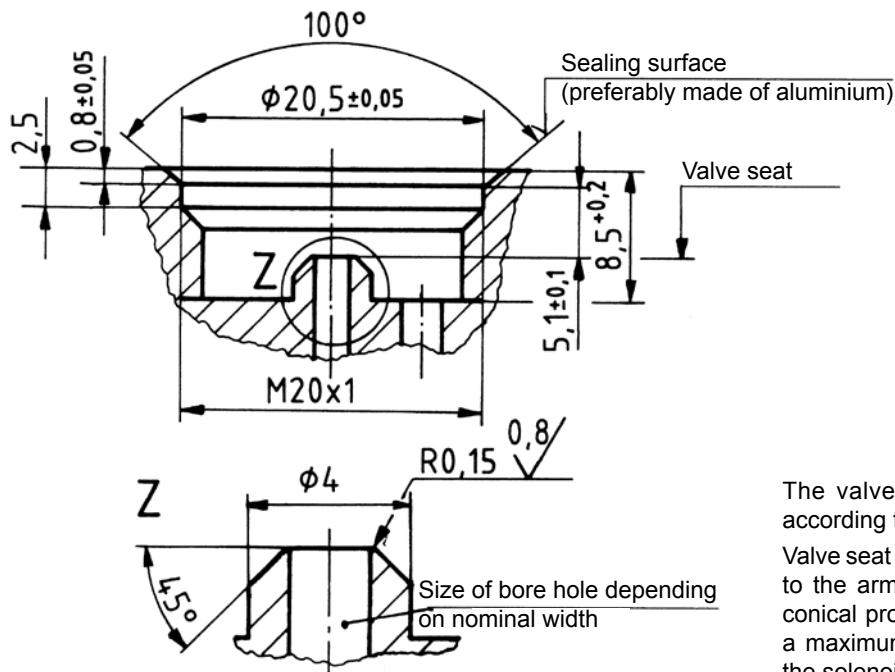


Fig. 4: X BP X 030 K54 A01
for 3/2-way-valve, de-energized closed

Fig. 5: X BP X 030 K54 A02
for 3/2-way-valve, de-energized open

Fig. 6: X BP X 030 K54 A03
for 2/2-way valve



The valve construction shall be executed according to fig. 7.

Valve seat with largest possible rectangularity to the armature axis of the solenoid and a conical profile with a smooth surface ensure a maximum performance and service life of the solenoid valve.

Fig. 7: valve to X BP X 030 K54 A01

Type code

	X	BP	X	030	K	54	A01
Device group							
Series							
Modifications							
Size in the series							
Execution in the series							
Protection code							
Design number							

Order example

DC	Type	X BP X 030 K54 A01
	Voltage	== 24 V DC
	Operating mode	S1 (100 %)
AC	Type	X BP X 030 K54 A01
	Voltage	230 V / 50 Hz
	Operating mode	S1 (100 %)

Specials designs

Please do not hesitate to ask us for application-oriented problem solutions. In order to find rapidly a reliable solution we need complete details about your application conditions. The details should be specified as precisely as possible in accordance with the relevant -Technical Explanations.

If necessary, please request the support of our corresponding technical office.