



Ex-proof

APPLICATIONS







The explosion-proof ARGO-HYTOS valves open you world for dangerous application in order to have safety environment

| Symbol | Type Code Data Sheet | Size | Flow/Pressure Ipm (GPM) / bar (PSI) | | | | |
|--------------------|--|---------------------------------|--|--|--|--|--|
| | Explosion Proof, 4/2 and 4/3, Directional Control Valve, Solenoid Operated | | | | | | |
| ^a A B W | RPEX3-06 HA 4054 | Size 06 (D03) | 60 (16) / 350 (5100) | | | | |
| | Explosion Proof, 4/2 and 4/3, Directional Control Valve - Spool Position Monitoring | | | | | | |
| | RPEX3-06*S6 HA 4094 | Size 06 (D03) | 60 (16) / 350 (5100) | | | | |
| | Explosion Proof, Auxiliary Lever Override for Solenoid Operated Valves | | | | | | |
| | RPERX3-06 HA 4095 | Size 06 (D03) | 60 (16) / 350 (5100) | | | | |
| | Explosion-proof, 4/2 and 4/3 Directional Control Valve, Pilot Operated | | | | | | |
| | RNEXH1-10 HA 4077 | Size 10 (D05) | 150 (40) / up to 420 (6100) | | | | |
| a W Y I I I W b | Explosion-proof, 4/2 and 4/3 Directional Control Valve, Pilot Operated | | | | | | |
| | RNEXH5-16 HA 4058 | Size 16 (D07) | 300 (80) / up to 420 (6100) | | | | |
| | Explosion-proof, 4/2 and 4/3 Directional Control Valve, Pilot Operated | | | | | | |
| | RNEXH4-25 HA 4059 | Size 25 (D08) | 600 (160) / up to 420 (6100) | | | | |
| 0 | Explosion Proof 2/2 Directiona | l Valve, Solenoid Operate | d, Spool Type, Direct Acting | | | | |
| W T | SD2EX-B2 HA 4064 | 7/8-14 UNF | 45 (12) / 350 (5100) | | | | |
| 2 | Explosion Proof 3/2 Directional Valve, Solenoid Operated, Spool Type, Direct Acting | | | | | | |
| W ₃ T | SD2EX-B3 HA 4065 | 7/8-14 UNF | 60 (16) / 350 (5100) | | | | |
| 2 4 | Explosion Proof 4/2 Directiona | il Valve, Solenoid Operate ⊤ | d, Spool Type, Direct Acting | | | | |
| W ₁ TI | SD2EX-B4 HA 4066 | 7/8-14 UNF | 50 (13) / 350 (5100) | | | | |
| | Explosion Proof 2/2 Directional Valve, Solenoid Operated, Poppet Type, Piloted | | | | | | |
| 2 | SD3EX-B2 HA 4067 | 7/8-14 UNF | 75 (20) / 420 (6100) | | | | |
| W | Explosion Proof 2/2 Directional Valve, Solenoid Operated, Poppet Type, Piloted | | | | | | |
| W. 4 | SD3EX-C2 HA 4089 | 1 1/16-12 UN | 150 (40) / 350 (5100) | | | | |
| | Explosion Proof 2/2 Directional Valve, Solenoid Operated, Poppet Type, Direct Acting | | | | | | |
| MŽII | SD1EX-A2 HA 4088 | 3/4-16 UNF | 30 (8) / 350 (5100) | | | | |
| 2 | Explosion Proof 3/2 Directional | Valve, Solenoid Operated | , Poppet Type, Direct Acting | | | | |
| M&\\\d | SD1EX-A3 HA 4068 | 3/4-16 UNF | 40 (11) / 350 (5100) | | | | |
| | Explosion Proof 4/3 Proportion | nal Control Valve, Screw-ii | n, Cartridge Design | | | | |
| a | SD2PX-B4 HA 5186 7/8-14 UNF 25 (7) / 250 (3630) | | | | | | |
| | Explosion Proof Proportional Directional Control Valve | | | | | | |
| | PRMX2-06 HA 5183 | Size 06 (D03) | 28 (7.4) / 350 (5100) | | | | |
| | Explosion Proof Proportional Directional Control Valve, Pilot Operated | | | | | | |
| | PRMX8-06 HA 5185 | Size 06 (D03) | 140 (37) / 350 (5100) | | | | |
| • | - | ressure Control Valve, Red | ucing - Relieving, Direct-Acting | | | | |
| W P I T | PVRMX3-103 HA 5184 | M24x1.5 | 40 (11) / 90 (1300) | | | | |

We produce fluid power solutions



EXPLOSION PROOF Valves...

...the explosion-proof ARGO HYTOS valves open you world for dangerous application in order to have safety environment...







ATEX Certificates Review:

| Voltage | ATEX Certificate N.: EPS14ATEX | ATEX Certificate N.: IECEx EPS14.0064 X |
|---------|---|---|
| | (Ex) M2 Ex mb Mb | Ex mb I Mb |
| AC | (x) II 2G Ex mb IIB T4, T5, T6 Gb | Ex mb IIB T4, T5, T6 Gb |
| | (x) II 2D Ex mb IIIC T135°C, T100°C, T8 | B5°C Db Ex mb IIIC T135°C, T100°C, T85°C Db |
| | E LAG E LAG | E L LAM |
| DC | (Ex) I M2 Ex e mb I Mb | Ex e mb I Mb |
| | €x II 2G Ex e mb IIB T4, T5, T6 Gb | Ex e mb IIB T4, T5, T6 Gb |
| | (x) 2D Ex tb C T135°C, T100°C, T85 | 5°C Db Ex tb IIIC T135°C, T100°C, T85°C Db |

- Wide range of temperature class T4, T5, T6
- Wide range of applications Gas (IIB), Dust (IIIC) and Mining (M2)
- Worldwide use through IECEx and ATEX certificate
- ATEX, IECEx solenoid certifications unified design for all Zones and Areas

Explosion Proof Solenoid:

- Terminal box instead of pig tail cable opens a wide range of cables.
- Robust valve and solenoid design (Mining mechanical impact test proven)
- AC and DC types with low 10 W and high power 18 W Version
- Up to + 70 °C ambient temperature
- High efficiency requires low electrical power.
- Solenoid interchangeability between Cartridge and CETOP Modular valves

Technical Features:

- Directional spool, poppet and Proportional valves
- Wide range of manual overrides including hand lever options
- Exceptional high hydraulic power in world-wide range
- All valve ranges designed for 10 Mio life time test also for sealing
- Ultra-tight poppet valves for pressure rating 420 bar
- Pressure range 350 bar for spools and 420 bar for poppet versions, Flow range from 25 lpm to 600 lpm
- Surface protection 520 h acc. to ISO 9224 Standard
- SIC Spool valves with feature of tumbling nose to compensate misalignments of cavity production spool never blocks!

Key Shot RPEX3-06*S6







SD2EX-B2



SD3EX-C2



SD1EX-A3



PRMX2-06





ATEX and IECEx www.argo-hytos.com



Zone / Division clasification

Zone -> EU -> ATEX & IECEx directives

→ US → NEC 500 & NEC 505 directives Division or Zone

Simplified:

NEC 505 = IEC NEC $500 \neq IEC$





There are both possibilities in US either NEC 500 or NEC 505

| | | | Flammable Material | | |
|--------|-------------|-------------------------|---------------------------|-----------------------|--|
| | | Present Continuously | Present Intermittently | Present Abnormally | |
| IEC/EU | | Zone 0 | Zone 1 | Zone 2 | |
| US | NEC® 505 | Zone 0 | Zone 1 | Zone 2 | |
| | NEC® 500 | Division 1 | Division 1 | | |
| CA | CEC | 7ana 0 | 7ana 1 | Zone 2 | |
| | Section 18 | Zone 0 | Zone 1 | Zone Z | |
| | CEC Annex J | Division 1 | Division 1 | | |

